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Deputy Medical Officer of Health :

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Air Raid Precautions :

A. M. Fraser, L.R.C.P.E., L.R.C.S.E., D.P.H.

Ham Green Hospital and Sanatorium :

B. A. I. Peters, B.A., M.D., B.C., D.P.H.

Southmead General Hospital and Snowdon Road Hospital :

P. Phillips, M.Sc., M.D., Ch.B.

Frenchay Park Sanatorium :

E. Evelyn Mawson, M.D., Ch.B.

Babies' Home :

Greta Hartley, M.D., M.M.

Residential Nurseries :

A. Alison Craig, M.B., B.S., D.P.H., D.C.H.

Other Principal Assistants.*Administration :*

J. G. Watson

Chief Sanitary Inspector :

F. J. Redstone, F.S.I.A., M.R.San.I.

Matron, External Nursing Services:

Miss W. A. Johnson.

Public Analyst :

F. E. Needs, F.I.C.

Veterinary Surgeon :

G. E. Henson, F.R.C.V.S.

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CITY AND COUNTY OF BRISTOL

ANNUAL REPORT, 1943

My Lord Mayor, Ladies and Gentlemen,

I have the honour to submit my report on the state of the public health and sanitary circumstances of the city for the year 1943. This is the first published report since 1938. During the war years publication has been suspended but it is felt that an abridged report should now be published. This abridged document summarises the more important aspects of the work of the department, including the city, port and school medical services for 1943. For reasons of economy in paper and labour data collated in accordance with the normal procedure have been reserved for publication after the war. The present report follows the lines suggested by the Ministry of Health in Circular 10/44, dated February, 1944, and deals with subjects of current interest, particularly tuberculosis, venereal disease and diphtheria immunisation.

In addition I have included at the request of the Health Committee a series of lectures of great public health interest given in 1880 by Dr. David Davies, who was the first Medical Officer of Health for this city (1855 to 1886). They foreshadow many public health measures since brought to fruition.

I. VITAL STATISTICS.

Tables covering the vital statistics of the city are included in the Appendix. These figures are based on information supplied by the Registrar-General, who has particularly directed attention to the fact that the estimates of the numbers and distribution of the non-civilian population are not available and that non-civilian deaths and non-civilian notifications are excluded. The estimated population from 1940 onwards is therefore the civilian population only, and the various rates calculated on this basis are in consequence slightly over-stated.

The following short paragraphs point the principal features of the published figures and it is interesting to note that the war years contain several high and low records.

Population.

With the above reservations the population of the city, as estimated by the Registrar-General at mid-1943 is 370,800, an increase of 8,600 on the figure supplied for mid-1942.

Marriages (Rate : 16.8 per 1,000 population).

The marriage rate had been increasing consistently every year since 1932, and this increase was considerably accelerated during the war up to 1942. In 1943, however, there was a marked drop in the number of marriages and the marriage rate was the lowest since 1934.

Births (Rate : 18.57 per 1,000 population).

The birth rate reached the lowest level for many years in 1935, but since that date up to the commencement of the war there had been a moderate but steady increase. The war years, apart from 1941, have brought a substantial increase in the birth rate. The fact that marriages have taken place at an earlier age under war conditions may account for this to some extent. As already stated, the marriage rate has now fallen off and the increased birth rate may therefore prove temporary only to be off-set later on by a compensating fall.

The total number of births which took place in Bristol during 1943 was 7,230. Of these, 1,039 were cases not resident in the city whilst 694 Bristol babies were born outside the city, giving a corrected figure of 6,885. Of the total births 5,386 occurred in Institutions in the city, and of these 2,577 were at Southmead Hospital. At the Cedar Hall Annexe which is outside the Bristol Registration Area 295 babies were born.

Stillbirths (Rate : 29.46 per 1,000 total births).

The year 1943 brought a new low record in the number of stillbirths (209) and in the stillbirth rate since the year 1927, when stillbirths first became registerable, being now just below 30 per 1,000 total births compared with an average of 38 for the 16 years. There were 49 outside the city cases not included in the above figure.

Illegitimacy (Rate : 63 per 1,000 live births).

In 1943 the illegitimate rate of 63 per 1,000 live births showed a substantial increase over the previous three war years and is the highest recorded rate since the commencement of the first world war. It represents an increase of approximately 100% over the average for the five years immediately preceding the present war. The average for the present war up to date is about the same as that for the period 1914-1919. In England and Wales during 1939 and 1940, about two-thirds of all births resulting from extra-marital conceptions were legitimised by marriage before the birth took place. The proportions for recent years are not yet known but the absence abroad of the male partner may well have prevented many such marriages taking place, leading to a fall in the proportion which could be legitimised. If this has occurred in large and increasing numbers of cases it might account at any rate in part for the rise in illegitimate births.

Deaths (Rate : 12.40 per 1,000 population).

The death rate which showed a rise for the years 1940 and 1941 as a result of civilian war casualties shows a slight increase over the preceding year. Owing to the magnitude of local population movements and the uneven incidence of civilian war deaths, the preparation of the Areal Comparability Factor which makes allowance for dispersion over age groups and enables the local death rate to be compared with the death rate for the country as a whole or with the mortality in other local areas is not available and is being suspended under present conditions.

Natural Increase (Rate : 6.17 per 1,000 population).

The natural increase of population (i.e. by the excess of births over deaths) of 2,287 was equivalent to a rate of 6.17 per 1,000 population, the highest figure recorded since the year 1922. It will be noted, however, that in the years 1940 and 1941 there were slight natural decreases in population.

The number of male births has exceeded the female births in every year since the last war. The total number of males in excess of females born over the period since the last census 1931 (when the female population exceeded the male population by 27,000) is 2,133. During the same period, however, female deaths exceeded male deaths (non-civilian excluded) by 320 because of the greater number.

Infant Mortality (Rate : 45 per 1,000 live births).

There were 391 infant deaths in the city during 1943, but 82 non-residents must be deducted and four deaths of Bristol children outside the city included to correct the figure to the Registrar-General's total of 313.

This gives an infant mortality rate of 45 per 1,000 live births which exceeds the low record rate of 37 for the previous year. The war years have also included the highest rate (56 in 1940) recorded for 13 years. It is interesting again here to look back to the previous war period and to note that an infant mortality rate of not less than twice as high was quite common, whilst 50 years ago the rate was between three and four times as high as it is to-day.

The infant mortality rate amongst illegitimate infants was again in excess of the legitimate rate at 53 per 1,000 illegitimate live births. This compares with the low record of 46 per 1,000 in the previous year.

The illegitimate infant mortality rate for the past 10 years averages 91 per 1,000 illegitimate live births which is double the average legitimate rate of 45 per 1,000 legitimate live births.

Neo-natal Deaths (Rate : 27.7 per 1,000 live births).

Registrar-General's figures for this age group are not available but our locally corrected figures show that 191 deaths of infants under one month old were recorded during 1943, giving a neo-natal death rate of 27.7 per 1,000 live births, equal to 61% of the total infant deaths. Although the number of neo-natal deaths is steadily declining, the rate of decrease is not so great as that for infant deaths. Premature births (43%) and congenital malformations (16%) remain the chief causes of this loss of life.

Maternal Mortality (Rate : 1.41 per 1,000 total births).

A comparatively low figure for maternal mortality was again recorded for 1943, but the rate of 1.41 per 1,000 total births was somewhat above the low record of 1.29 for the year 1941.

II. GENERAL PROVISION OF THE HEALTH SERVICES.

Laboratory Facilities (statistics pages 25-27).

The bacteriological, pathological and chemical examinations required by the Corporation are carried out at the Preventive Medicine Department at Canynge Hall under the terms of an agreement between the City and the Bristol University. In January the Council revised this agreement owing to the increased use of materials and the rise in wages and prices due to war conditions. The amount of the increase for the period from 31st July, 1942 to 31st December, 1943 was £3,100. Under the original agreement a grant of £6,536 per annum was paid to the University in respect of this work. It was also necessary to renew certain apparatus costing roughly £280.

In addition it was decided to equip and staff a pathological laboratory at Southmead to deal with examinations which could be conveniently carried out on the spot and to use the facilities at Canynge Hall only for the more complicated examinations. These proposals were approved by the Council in January and the laboratory has been in full operation since June. Towards the end of the year the congested conditions of working in the main laboratory at Canynge Hall made it necessary to appropriate four vacant rooms at the top of the building and adapt them for use as a laboratory at a cost of £1,420.

The question of providing an adequate laboratory at Ham Green still remains an urgent need.

I have received the following report from Mr. F. E. Needs, Public Analyst for the City and County of Bristol on the work of his department during the year :—

Official food standards have long been over-due in this country and it was a matter of considerable satisfaction that the Minister of Health was empowered under section 8 of the Food and Drugs Act 1938 to make regulations regarding the composition of any food. However, this Act did not come into force until October 1939, when the Ministry of Food was in existence owing to the outbreak of war. Since that time the Minister of Food has been empowered to exercise control over all food substitutes, and as a result the position at the present time is much more satisfactory than that during the early years of the war. Furthermore, the necessity of food standards in wartime, when the national diet is only just sufficient to maintain the health of the community, is even more important than in the times of peace, when food is plentiful and choice is unlimited. For that reason, the Minister of Food is now empowered under the Defence (Sale of Food) Regulations, 1943, to regulate the composition of any food, and already Food Standard Orders are issued for mustard, self-raising flour, shredded suet, baking powder and golden raising powder. There are also a number of Statutory Rules and Orders issued by the Ministry of Food governing the composition of soft drinks, sausages and canned meat, canned soups, jam and saccharin tablets. Hence, these regulations are a great advance in food legislation and should equally benefit the consumer, the manufacturer and the local authority.

During the year 2316 samples were examined, of which number, 1479 were submitted under the Food and Drugs Act. Seventy-one of the latter samples were adulterated, equal to an adulteration rate of 4.73%.

Milk samples.

These numbered 990, of which 46 were adulterated, equal to 4.65%. Added water was certified in 35 samples, the highest amount alleged being 17.6% of added water. Only five milks were slightly deficient in non-fatty solids, accompanied by a normal freezing point, indicating that the slight deficiency was due to natural causes and not to added water. Eleven samples were deficient in fat, the highest deficiency being 25%. The mean figures of all milk samples, genuine, adulterated, suspicious and abnormal, were :—Fat 3.59%, Non-fatty solids 8.71%, figures well above the legal standard.

Other food samples.

Of the 20 samples condemned, 13 were infested with either mites, beetles or moths, and it was considered that in the case of one sample the volume of living mites exceeded that of the sample. One whisky contained 11.5% added water, two samples of sausages contained sulphur dioxide preservative, two soft drinks were supplied with misleading labels and two samples of gelatine contained 750 and 580 parts per million of zinc showing that industrial gelatine or glue had been supplied instead of the edible variety.

Many other foodstuffs were submitted, some from the port and the contracts department and others from the chief sanitary inspector, as a result of complaints, fitness for human consumption or alleged illness. Of those samples condemned, a considerable number were unfit on account of infestation.

Drugs.

Of the 45 samples submitted, five were condemned. Two samples of camphorated oil were deficient in camphor, two samples of iodine solution were deficient in iodine, and one sample was grossly excessive in iodine and potassium iodide.

Examinations were made under various Acts, including the Rag Flock Act, the Pharmacy and Poisons Act, and the Fertilisers and Feeding Stuffs Act, and tests for calorific value, pressure and purity were carried out under the Gas Undertakings Acts 1920-1934 at the three gas stations in the city involving practically daily visits. The declared calorific value is 460 B.Th.U. (gross) per cubic foot, and the average value was well maintained throughout the year, being greater than 461 B.Th.U.

The samples under the heading "Miscellaneous" were very varied—from biological material to bricks and mortar. Some of these included urines containing 0.2 mgrm, 0.3 mgrm and 0.68 mgrm of lead per 24 hours specimen, respectively, and one urine contained 8.7 grains of aspirin.

The small amount of liquid contained in two milk bottles was shown to be urine. A hair shampoo, which had caused unconsciousness proved to be practically pure trichlorethylene—a most dangerous stuff for the purpose.

Finally, the water supply of the city was examined regularly as well as the supplies to the various hospitals and institutions of the Corporation, and monthly examinations were made of the atmospheric pollution from a standard deposit gauge at the Clifton Zoological Gardens.

Clinics (statistics page 28).

With one exception (children 1-5 years) attendances at clinics continued to increase during 1943. Compared with 1938 attendances have increased by 21,256 in the case of ante-natal sessions; 818 for post-natal sessions; 5,246 for children under one and 2,380 for sunlight treatment. In the case of children 1-5 years there was a decline of new attendances from 1,258 to 496, from which it would appear that mothers do not take up war work to any extent until their babies are a year old. However, many of these infants are kept under medical and nursing supervision at nurseries and nursery schools.

Treatment of Head Lice.

In July the Ministry of Health issued a circular to Welfare Authorities on the steps to be taken to assist mothers and young children in the promotion of cleanliness and good habits and the elimination of verminous conditions. The preparation "Lethane Brilliantine" recommended by the Ministry was first introduced in Bristol in 1941 upon the advice of Dr. H. G. H. Kearns of the University Research Station, Long Ashton, who recommended the use of Lethane 384 Special (a solution of a mixture of organic thiocyanates in 50% of a highly refined petroleum oil) to combat a severe pest of flies. A single application of 40% Lethane Brilliantine is thoroughly applied to the roots of the hair, followed a week later by a thorough soap and water washing. Immediately after washing the hair is damped with dilute acetic acid and combed to remove all dead nits.

Observations were made on families chosen for their outstanding and persistent infestation which had hitherto defied all efforts and it was found that in every case the lice were killed instantly upon contact with Lethane, the maximum period of immunity from further infestation being 10 days. Results of treatment in families persistently verminous are, of course, only satisfactory where the entire family is treated at the same time and co-operation is obtained. An experiment was made in issuing to parents a small supply of lethane brilliantine free of charge for treatment at home, but this was not very successful as in most cases it was not thoroughly applied to every part of the scalp. Treatment is now only carried out by trained staff at the clinics, except in special cases of children under school age, who for domestic reasons cannot be brought to the clinic, when the treatment is carried out by a health visitor at homes or in schools.

Great attention is paid to the question of verminous heads in school children, all suspected cases being sent to the clinics for examination and treatment, and where the co-operation of the mother is obtained the scheme works satisfactorily with a definite improvement in the condition of heads. There is, unfortunately, in many cases a measure of indifference to verminous conditions, a few nits or lice being regarded as a normal state of affairs, and in these families the children are constantly being re-infected after having been effectively cleaned at the clinic. The co-operation of the chief sanitary inspector is obtained where necessary in taking steps for the treatment of adult offenders and for the disinfection of bedding and clothes. In order to overcome the apathy and indifference of some of the mothers the teaching of cleanliness is stressed at the ante-natal centres, where every mother's head is examined as a routine measure and steps taken where necessary to have it cleansed. A great deal more teaching of the mothers of school children, however, is needed.

Fine tooth combs can be purchased at the clinics for 3/- and an increasing number are being sold. Where parents are unable to pay this amount a comb can be lent.

Treatment of Scabies (statistics page 33).

The Scabies Order, 1941, gives power to require the examination and treatment of persons suffering from scabies. The measures taken to overcome this distressing and irritating condition have been particularly successful in Bristol where patients are first bathed before the application of the remedial emulsion (benzyl benzoate for school children and adults; sulphur cream for younger children). Heat treatment of clothing and bedding follows in all cases and great appreciation has been expressed for the rapid cure effected by these methods. Although scabies is not notifiable a considerable degree of co-operation between general practitioners and the Health Department has been achieved and every endeavour is made to treat the family as a unit and not only the individual patient. Where patients are referred to the local treatment centre the case and family contacts are investigated by sanitary inspectors, who on occasion found it necessary to advise complete families to be treated.

Details of treatment at the various centres indicate a decrease in the number treated, despite the fact that the Health Committee agreed during the year to treat cases from Bathavon, Frome and Keynsham District Councils and from Axbridge. An additional treatment station was opened in April at the Gas Cleansing Station, Avonmouth, and in November female cases were transferred from Mayor's Paddock Baths to the Gas Cleansing Station, Marybush Lane.

Dental Treatment (statistics page 32).

Since the outbreak of war the joint dental surgeons employed by the Corporation for dental work in city hospitals and institutions, health centres and clinics, have been called up for military service and with the difficulty in obtaining full-time dental surgeons it has been necessary to obtain part-time assistance in order to continue these services.

Patients at Southmead Hospital are now treated at three sessions each week, the two additional sessions being devoted mainly to the care of Service patients. Weekly visits were paid to Ham Green, Hortham Colony and Stapleton Institution, and monthly attendances at Charterhouse and Frenchay Park Sanatorium. Treatment was carried out at Snowdon Road Hospital on occasions when several patients required multiple extractions. The dental condition of the children at the Downend Homes was found to be very satisfactory. Altogether a total of 1,648 treatments were given to patients in city hospitals and institutions.

Maternity and Child Welfare attendances have been good and it is encouraging to notice, particularly among the younger women, an increasing appreciation of conservative treatment.

HOSPITALS.

General.

During the year the pressure on hospital beds, especially for chronic sick cases, became acute. In view of the great difficulties in obtaining additional accommodation and staff it was decided to ask the Ministry of Health for authority to engage home nurses to deal with chronic sick cases in their own homes and for home helps to assist with domestic duties in such cases. Unfortunately, these proposals have not received the official approval of the Ministry of Health.

In May the regional hospital officer permitted certain types of case to be sent from Bristol to St. Martin's Hospital, Bath, to release beds for chronic sick, and some of the beds reserved under the Emergency Hospital Scheme are now in use, but the problem still remains serious, particularly in regard to female cases.

The greatly increased demand for maternity accommodation continues and though Cedar Hall, Frenchay, was opened at the end of January as a maternity annexe to Southmead Hospital, taking twenty cases, it has been necessary to seek further accommodation. In October the Council approved the acquisition of Mortimer House, Clifton, at a cost of £9,000. Minor alterations and additions to the heating system will cost £600 and the equipment and furniture is estimated at £1,400. These premises will accommodate forty maternity patients, and provide a maternity and child welfare clinic, including ante-natal, immunisation and treatment of minor ailments, waiting room and offices for the district health visitor, district midwife and district sanitary inspector. When Mortimer House is ready for occupation in July it is proposed to transfer the twenty maternity beds from Cedar Hall and to use the latter building for additional nursery accommodation.

Apart from the difficulty of providing adequate hospital beds under war-time conditions, the shortage of hospital orderlies and domestic workers remains a serious problem. In the case of Ham Green and Charterhouse Hospitals the position threatens to curtail the work of these institutions. In September a resolution of the Health Committee was sent to the Minister of Health, and the Minister of Labour and National Service drawing attention to this serious deficiency and asking for more energetic use of the Minister of Labour's power to direct women into this employment and to retain those already in the service.

The Rushcliffe Committee recommendations for the salaries of nursing staff were adopted by the Council on 1st April.

Southmead Hospital (statistics page 36).

The most important development at Southmead during the year was the erection of a prefabricated building providing two wards for the treatment of venereal disease (full details will be found under the heading "Treatment of Venereal Disease" on page 13) and the extension of maternity accommodation mentioned above. In addition to the acquisition of Cedar Hall, part of the casualty department in the Monks Park Clinic vacated by the First Aid Post has been converted into a maternity ward containing twenty beds.

Following the Government report on "The Rehabilitation and Re-settlement of Disabled Persons" steps are being taken to organise a Rehabilitation Department at Southmead Hospital, but the ultimate development of this service is, of course, dependent on the provision of adequate equipment and accommodation. Two masseuses were sent to the Government Training Centre at the end of the year and the Deputy Medical Superintendent has also attended a short Rehabilitation Course.

The increased demand for institutional provision for the chronic sick has already been mentioned, and Snowdon Road Hospital worked to full capacity during the year.

Ham Green Hospital (statistics page 36).

One of the greatest problems at Ham Green Hospital during the year has been the lack of adequate staff, both nursing and domestic workers. The position with regard to non-resident staff has been eased by the provision of daily transport from Bristol but there is still a considerable shortage of nurses and domestic workers.

In order to provide additional accommodation for patients G and H wards, used as a wardens' post and casualty department since the commencement of the war, have reverted to accommodation for patients and K Block, former staff quarters, has been reconditioned to provide additional beds for observation cases. In addition, six chalets formerly used only during the summer months have been provided with heating to enable them to be used throughout the year. As a result of these measures the available beds have been increased by 32.

In addition to the 62 beds for cases of infectious disease at Charterhouse Hospital, there are now 50 beds available for early female cases of tuberculosis and these have proved extremely useful in keeping the waiting list down to a very small number.

Frenchay Park Sanatorium (statistics page 36).

Since March, 1942, the investigation of "observation chests" at Frenchay Park Sanatorium has been considerably facilitated by weekly visits from Mr. R. Belsey, M.S., F.R.C.S. During 1943 90 bronchograms were done, almost all under anaesthesia, and these have made possible more rapid investigation, thus shortening the list of those awaiting admission.

Owing to the difficulties in obtaining orthopaedic appliances plaster splints have been extensively used and have proved satisfactory.

A carpentry class under a trained instructor has been started for the boys and another in shoe-making and mending will commence shortly.

Stapleton Institution.

Dr. S. Datta, Medical Officer, Stapleton Institution reports as follows :—

"The number of resident patients shows a marked decrease. This is in some measure due to a diminution in the number of patients admitted under the Lunacy Acts for the purpose of certification and transfer to the Mental Hospital. The reason for this is presumed to be the greater use now made of the provisions of the Mental Treatment Act, 1931, for the admission of patients direct to the Mental Hospital.

During August and September there was a moderately severe outbreak of Sonne dysentery in the Institution.

Nursing staff difficulties have now reached a point which is nothing short of deplorable. After the passing of the recent Act regarding assistant nurses the Committee felt it opportune to start a training school for assistant nurses. A Preliminary Training School is already working under the direction of a whole-time Sister tutor but the demand for training and instruction in this category of nursing does not appear to be very great.

For some years after the commencement of the war the institution continued to be recognised as a "second line" emergency hospital. This recognition has now been withdrawn, a commendable decision having regard to the very difficult staff problem at the institution.

Casualty Services.

The main feature during the year has been the gradual re-organisation of the various units of the casualty services to become increasingly dependent on part-time personnel. To meet the deficiencies in numbers caused by the release of whole-time personnel required by the Regional Commissioner, the Ministry of Labour and National Service directed 211 men and 382 women to part-time service during the year, almost all of whom required full training for the duties to which they were allocated.

Action Depots.

The senior depot officers of the part-time depots should be specially mentioned for the way they have received and handled the great influx of untrained personnel. The reduced whole-time staff have continued to perform extraneous duties required of them in connection with hospital and nursery evacuation, and transport of supplies. The reduction in number of the ambulance personnel necessitated re-distribution of vehicles so as to place a larger portion at the disposal of part-time drivers and attendants. Three subsidiary ambulance stations were created for this purpose.

By arrangement with the Ministry of Labour, short courses of instruction were given to all full-time drivers at a Government training centre in Bristol to enable them to deal with minor running repairs. In order to economise further in administration and manpower the repair and maintenance of the vehicles of the rescue service, the communications service and of the mobile canteens has been undertaken by the ambulance officer and his staff at the two repair depots.

First Aid Party Service.

In April, upon the direction of the Minister of Home Security, all members of the first aid party service were drafted into the rescue service, and as part of a new combined rescue service are maintaining their knowledge of first aid as well as learning the technical details of rescue work.

First Aid Posts.

There has been a considerable reduction in full-time staff attached to the ten fixed first aid posts. The doctors in charge look upon this with some anxiety and especially upon the lack of trained nurses.

Mobile Units.

Following the calling up for military service of the few drivers capable of managing heavy vehicles, these are being replaced by light units, consisting of a doctor, sister and two auxiliaries, who travel in a light car with equipment for immediate care only.

Ambulance Service.

In order to meet the urgent need of the new rescue service for more vehicles, 17 emergency ambulance cars have been transferred. The full-time (paid) establishment of the ambulance service has recently been subject to review by the Ministry and the number authorised has been reduced. Ambulances are now available to answer calls by the N.F.S. to fires during non-raiding periods.

Gas Decontamination.

In addition to the approved cleansing centres a large number of people have been trained under the housewives service to give washing facilities to people who may become contaminated by blister gas near their homes. Special out-door boiling tanks have been installed at the principal private laundries for the decontamination of public clothing.

Women's Voluntary Services.

In addition to their valuable services in connection with canteens, evacuation and clothing, the W.V.S. are now responsible to the Regional Commissioner for the enrolment and operation of a voluntary car pool, which is available for transport duties other than in connection with civil defence.

III. MATERNITY AND CHILD WELFARE (statistics page 28).

Midwifery Service.

The report of the Midwives Salaries Committee has been adopted by the Council as from 1st April, 1943. In order to bring into operation the revised hours of duty and leave recommended in the report, the appointment of three additional midwives was approved in September, making a total of 32 domiciliary midwives.

Home Helps.

The growing tendency for women to prefer confinement in hospitals or nursing homes has reduced the number of domiciliary midwifery cases. One of the main reasons is undoubtedly the great difficulty in obtaining domestic assistance, and during the year the Health Committee decided to appoint six full-time home helps, based on health centres, who are sent as required to homes where confinements have taken place or are imminent, and who undertake the domestic duties of the household. There is an increased demand for this service and it is proposed to employ an additional six home helps in the near future.

Nursery Accommodation.

As stated in previous reports, the babies' homes of the Guardians were appropriated under the Maternity and Child Welfare Act in 1930 and have been administered since by the Health Committee as a residential nursery nurses training college.

During war-time there has been a considerably increased demand for short-stay nursery accommodation. In an endeavour to cope with this problem a third nursery (Frenchay House, which accommodates 20 children) was opened by the Health Committee in January. This brought up the total accommodation to 103. During the year 326 children were admitted to the city's residential nurseries at Babics' Home, Downend, Frenchay House and Frenchay Lodge. Additional day-room accommodation was approved by the Council at these nurseries in April by the acquisition of three maycrete huts from the Government at a cost of £1,739. Difficulties arose, however, in obtaining suitable huts and components and it was not possible to erect them during 1943.

Evacuation Nurseries—Residential.

There are 17 evacuation nurseries established in reception areas for Bristol children, seven of which are administered by the Education Department. The Health Committee were originally made responsible for the evacuation nurseries for children under two and sick children under five, but owing to the great distances involved it was found impossible to give them the constant supervision necessary in the case of such young children and all these nurseries are now administered by the county medical officers concerned, with the exception of Penscot, which owing to its close proximity to Bristol has been retained by the Health Committee. These evacuation nurseries provide accommodation for 437 Bristol children.

War-time Day Nurseries.

By the end of 1943 18 war-time day nurseries had been opened, providing accommodation for 705 children under five. Although the attendance at the nurseries fluctuates for various reasons, e.g. illness, school holidays, mother giving up work—the attendances are considered to be satisfactory. Of the 484 mothers on war work taking advantage of the scheme, 91% have one child at a nursery, 8.3% have two, and .7% have three.

Adoption of Children (Regulation) Act, 1939.

This Act became operative on the 1st June, 1943, and the Health Committee assumed responsibility for adoptions under the Act. During the year 48 applicants were registered as prospective adopters, 28 children were placed and 15 legal adoptions completed. Notice was given by 28 prospective adopters who were making arrangements for adoptions through other agencies. This work involved 310 visits and 720 interviews.

IV. SANITATION, HOUSING, INSPECTION OF FOOD (statistics page 37).

General Sanitation.

Unsatisfactory environmental conditions gave rise to 2,878 complaints. The matters investigated covered a wide range and although due allowance had to be made for shortage of labour and materials, a considerable degree of satisfaction was obtained from the action taken, though in many cases requirements had to be reduced to a minimum. Other visits and action under the heading of general sanitation include offensive trades, camping sites, places of public entertainment, air raid shelter hygiene, water supplies, disinfection and disinfestation, smoke and grit nuisances, defective drainage, infectious disease inquiries (smallpox, typhoid, etc.), factories and workplaces and inspection of salvaged foodstuffs. The inspectors also took an active part in health education of the public with demonstrations and lectures.

Water Supply.

A constant supply of water of a high standard of purity was afforded during the year by the Bristol Waterworks Company. The number of dwelling houses connected to the mains is 109,434 and although no actual count has been taken of the houses which are not supplied directly or by means of standpipes the number is thought to be exceedingly small. The supply has no appreciable plumbo-solvent action.

Housing.

One of our chief concerns is the maintenance of good housing conditions in the city. Lack of materials and shortage of labour held up real progress under the Housing Act, but every effort has been made to make the best use of such housing accommodation as can be considered reasonable under present circumstances. A minimum standard of housing conditions has had to be accepted and from time to time certain properties are found to be in such a condition that it is not possible to visualise any works which would render them even tolerably fit. In such cases the necessary representation has been made to secure demolition or closing orders. The department hesitates to take this action, adding as it does to the general lack of housing accommodation which is so acute that even applications to temporarily re-let houses subject to clearance orders have been favourably considered.

All complaints regarding unsatisfactory housing accommodation received attention and where found urgently necessary, applications for alternative accommodation were strongly supported to the housing manager's department. In addition, many visits have been made and opinions given with reference to the future of properties made the subject of official inquiry by owners and other interested persons.

Supervision of Milk Supplies.

The total approximate daily distribution of liquid milk in the city is 35,000 gallons and of this amount more than 75% is processed by heat treatment (pasteurised and sterilised). All milk supplied to schools and institutions under the control of the Bristol Corporation is either pasteurised or tuberculin tested. Routine inspections were carried out at farms producing milk in the city, pasteurisation plants, milk storage depots, dairies and milkshops, and every effort was made to ensure satisfactory treatment and standard of cleanliness in production and distribution. A large number of samples were collected and submitted for chemical and bacteriological examination, and the necessary measures taken with regard to unsatisfactory supplies.

The institution of a "milkless" day in Bristol is a matter of concern and strong representations have been made to the Ministries of Labour and Food, and other bodies in an effort to re-establish a seven-day delivery, so far without success.

Meat Inspection.

Under the Ministry of Food scheme, Bristol is a slaughtering centre for the western area. During the year a total of 124,370 carcasses at the public abattoir, Hotwells lairs, bacon factories, and all animals slaughtered for institutional use were inspected. Meat inspection protects the public from dangers that might arise from the consumption of unfit food and efficient examination before release in this city or to other towns and districts in the zone is essential. In 1943 over 238 tons of meat were condemned as unfit for human consumption.

Inspection of Food Premises.

Generally these establishments are kept in a reasonable state of cleanliness. This is highly satisfactory having regard to the shortage of labour and materials necessary to maintain hygiene. It is found, however, that a number of food preparing premises leave room for improvement, and in spite of recent successful prosecutions strong warnings have been necessary in cases where flagrant contraventions of hygienic standards were observed. Supervision of these premises, so particularly necessary under war-time conditions, has been most difficult because of lack of adequate inspectorial staff.

Food Sampling, Poisons, Fertilisers and Feeding Stuffs.

A large number of samples of food were submitted to analysis for adulteration, deficiency, unlawful preservative or other contravention of the respective acts or regulations and proceedings followed infringement in five cases. Visits to premises selling substances classed as part II poisons disclosed a number of instances where articles were improperly stored or being sold without a licence. All samples of animal feedingstuffs were found to be satisfactory on analysis. Effective action was taken with regard to noxious weeds and clearance of land, although labour shortage caused some difficulty in this connection.

Rag Flock Act.

Samples of rag flock used in the manufacture of bedding and upholstery work taken for the purpose of analysis revealed a satisfactory standard of cleanliness well within the limits prescribed in the regulations.

Food Decontamination Service.

During the year additional food treatment squads have been trained in this work by the health department in collaboration with the A.R.P. controller's decontamination staff. The inspectorate have taken a great interest in these duties, and have attended lectures and demonstrations in the western area. Demonstrations with real mustard gas staged at Avonmouth Docks were attended by a large number of A.R.P. officers and the regional training officer of the Ministry of Food and Home Security had expressed satisfaction as to the practical, efficient and workmanlike manner in which the treatment was carried out. Every effort has also been made to acquaint the general public with the measures to be taken to prevent contamination of foodstuffs in factories, warehouses and domestic buildings, and a gas-proof food container has been perfected in collaboration with the public analyst.

The Ministry of Food has decided that the food treatment establishment for Bristol shall be 200, and weekly training and refresher lectures and demonstrations given outside the normal office hours are being attended by 150 members of this service.

Destruction of Rats and Mice.

Under the Rats and Mice (Destruction) Act, 1919, it is the duty of occupiers of premises to exterminate rats and mice. During the year a total of 1,299 complaints of infestation by rats and mice were recorded. The rat officer with a team of rat catchers and in co-operation with the district inspectors took a hand in dealing with these pests. Damage by enemy action caused a wide dispersal of the rat population in the city and port areas and a special effort was commenced to reduce the rat population in all industrial and domestic premises. In addition, the public sewers were baited and other conditions favourable to the breeding and harbourage of rats, such as bombed sites, received constant attention; where necessary representations were made for the removal of debris and other accumulations. In this way, and by free advice as to the most effective measures of rat proofing buildings a continuous drive has been maintained to prevent the menace assuming formidable proportions.

V. PREVALENCE AND CONTROL OF INFECTIOUS AND OTHER DISEASES

(See Appendix, Tables 2-8 pages 18-24).

Diphtheria.

The number of deaths recorded (namely five) is the lowest during the last 50 years. Although held in check by immunisation (the average for the last 10 years being 30% below the average for the preceding 10 years) the disease continues to be fairly prevalent, incidence being highest in the age groups 4-8 years. During the last 20 years a five-yearly cycle has been observed in the incidence of diphtheria. The years 1942 and 1943 being the mid-years of the current cycle are of low incidence and it remains to be seen as to whether the large-scale immunisation recently undertaken will interfere with the increase in incidence which might be expected next year in the natural course of events.

Scarlet Fever.

The incidence of scarlet fever has declined over the period of the last 20 years, this year's total of 913 cases being about average for the latter part of the period.

Cerebro-spinal Meningitis

There were 27 cases of cerebro-spinal meningitis notified in 1943. This is above the number notified in peace-time years but is very much less than the comparatively high figures 119 and 132 recorded in 1940 and 1941. The number of deaths is related to the incidence, amounting to a total of 76 for the war years so far, equal to 23% of the cases notified. During the last war of a total of 155 cases notified 99 (64%) resulted in death.

Measles.

Measles, which had been absent from the list of notifiable diseases since 1920, again became notifiable on the outbreak of war. The Bristol case rate of 13.96 for 1943 was 50% in excess of the rate for all county boroughs and great towns, but this high case rate did not result in a large number of deaths. Although the number of cases notified was 5,173, the number of deaths (6) remained at about the average for the last five years.

Whooping Cough.

In contrast to the relatively high incidence of measles as compared with the whole country, the whooping cough incidence rate was only about one-third of that in the 126 county boroughs and great towns.

Tuberculosis.

Since 1939, when there was recorded the lowest number of cases since pulmonary tuberculosis became notifiable, there has been an increase in the number of notifications each year, 598 for 1943 being the highest recorded since 1931. Although the number of deaths recorded from the pulmonary form is higher than that for 1942, there is as yet no evidence of any change in the downward trend since 1929.

The incidence of non-pulmonary tuberculosis, which remained fairly constant during the 1930's has shown a tendency to decrease during the 1940's to date; but there has been a marked increase in the number of deaths from this type in the past four years.

The percentage which the total tuberculosis deaths bears to the total deaths from all causes, (6.2%) should not be underrated for it will be observed from the age group classification that considerably more than half of these deaths occur under 45 years of age. Compare this with cancer (see below) where although the percentage of the total is much higher, over half the deaths are of persons over 65 years of age.

Respiratory Diseases other than Pulmonary Tuberculosis.

The influenza epidemic of 1943 resulted in 109 deaths from this cause, giving a death rate of 0.29 per 1,000, a slightly lower figure than that for the whole country. The full effect of the epidemic is not, however, apparent from these figures; there was an increase in the number of deaths from other causes, especially amongst the higher age groups, where influenza was probably also a factor. This was particularly so in the case of pneumonia (death rate 0.72 per 1,000) and bronchitis (death rate 0.82 per 1,000) where increases over the previous year of 14% and 64% respectively were recorded. The war years commencing with 1940, which was the highest, have brought a substantial increase in both of these diseases as a cause of death, the average rates for the four years being pneumonia 0.75 and bronchitis 0.87 compared with average rates for the previous ten years of 0.57 and 0.38 respectively.

Cancer.

Cancer remains the second highest cause of death, accounting for over 16% of all deaths in 1943. Apart from the early war years (1940-1942) when there was some decrease, the total number of deaths from cancer has shown a steady increase since the beginning of the century.

Heart Disease.

Heart disease is still the principal cause of death, accounting for 25.4% of all deaths with 76% occurring amongst people over 65 years of age. There were 1,168 deaths from this cause during the year. The record high figure of 1,609 deaths recorded for 1939 has been followed by lower figures for each succeeding year of the war, so that the rate of 3.15 per 1,000 population represents a return to pre-war levels.

In my report for the year 1928 attention was drawn to the fact that the death rate from this cause had doubled when compared with the years 1920 and 1921, and the registrar-general was quoted as attributing this considerable increase to the "increasing age of the population and to some extent to a change in certification consisting in an increased tendency to record myocardial degeneration on the certificates of death from causes giving rise to it." This tendency to increase has continued so that over the past 20 years the rate has been trebled, 3.15 per 1,000 compared with 1.11 for 1920. This continuing increase may still be attributable in some measure to the above noted causes.

Diphtheria Immunisation (statistics page 33).

In July the Ministry of Health announced a national publicity campaign and steps were taken to intensify local propaganda. Pamphlets were prepared for the use of teachers and every child took home a copy of the circular letter from the Minister of Health. Literature was distributed to general practitioners, district nurses, midwives and voluntary bodies interested in health work; the co-operation of members of the clergy was obtained in advising doubting parents, and posters were widely distributed throughout the city.

In this way an effort has been made to build up a body of informed opinion in the city to combat a great deal of misunderstanding which still exists among the general public. We are convinced, however, that it is through the medium of personal approach that the majority of parents are persuaded to take action. In this matter the health visitors, midwives, district nurses and school teachers were asked to make it their primary concern to use their influence to obtain parents' consent.

There are three main channels for dealing with applications for free immunisation under the scheme:—

- (1) Children under five, although they may go to a school to receive injections at the same time as their older brothers or sisters are mainly dealt with at the health centres and clinics. Special immunisation sessions are held at each centre but the service is also available at all times by appointment. In some instances special sessions have been held in hired premises, where there was a local demand at some distance from a clinic.
- (2) Applications in respect of school children are received by head teachers, and as the children are conveniently congregated in the school building arrangements are made as necessary for an immunisation team of doctor with one or two nurses to carry out injections on the school premises. In this way, loss of school time and the doctors' time is reduced to a minimum.
- (3) A general practitioners' scheme is in operation whereby parents may take their children for free immunisation to a practitioner if he is enrolled in the scheme. They account for approximately 25% of the immunisation of children under five years of age and receive their fees direct from the Corporation. The Health Committee provide the immunising material and material for Schick tests free of charge.

The combination of the foregoing factors has achieved remarkably good results; 8,000 applications were received through schools, 1,500 applied through the clinics and the numbers notified from general practitioners have shown a steady increase. Taking the period of protection to be four years after the completion of the injection it was estimated at the end of the year that the total number of children immunised was equal to 50% of the children under five years, and 70% of the children aged 5-15.

The policy recommended is that a child should be immunised as soon as possible after the age of nine months and receive a booster injection at four years nine months (just before commencing school) if the original injections have been given more than two years previously. A further booster dose should be given after a lapse of another four years.

The material used is the Ministry A.P.T. Two doses, 0.2 ccs. for the first and 0.5 ccs. for the second are usually given for the original course. The booster is a single injection of 0.5 ccs. It has been found that in practice over 90% of cases receiving the full course of injections are Schick negative, but owing to shortage of medical staff it has not been possible to carry out these tests.

It was necessary to increase considerably the number of sessions in schools and clinics to deal with the large number of applications, and to seek assistance from external sources, after re-allocation of the work of the department in order to give priority to immunisation. Doctors were loaned from the University departments and from the Army blood supply depot and school inspections were temporarily deferred.

The foregoing arrangements have been augmented by follow-up schemes. The parents of every child reaching the age of nine months will in future receive an information leaflet and consent form, together with particulars of how to obtain the free service. Records of immunisations are carefully preserved so that just before a child reaches school age, the parent will receive a letter recommending the booster injection where more than two years have elapsed since the original injections.

Tuberculosis.

Financial Assistance (statistics page 34).

The Government scheme of financial assistance to men and women undergoing treatment for pulmonary tuberculosis came into operation in June, 1943. Under this scheme maintenance allowances based on a standard scale and without any test of means, discretionary allowances on proof of need towards meeting standard charges in cases where the patient would be unable to meet these liabilities, and special payments to meet special circumstances are made, provided the patient follows a course of treatment advised by the tuberculosis officer. A welfare officer, one clerk and two additional health visitors have been appointed to carry out this scheme and details of their work up to the end of the year will be found on page 34, Table 12.

Mass Miniature Radiography.

In October, 1942, a formal request was made to the Ministry of Health for the allocation to Bristol of mass miniature radiography apparatus, which enables groups of persons to be examined in a very short space of time at a single centre. The apparatus will cost £2,000, including accessories, and will be operated from the central health clinic. Owing to war conditions it will not be possible to make full use of the apparatus, which will ultimately be mobile and used in a wide area. Staffing arrangements have been made therefore to cover the first year by the appointment of a director of radiological services, a medical director of mass radiography, radiographer, dark room assistant, an organising secretary and two clerks. It is hoped to bring the scheme into operation during 1944 and at first the examinations will be confined to school leavers and entrants to the Corporation service.

Diabetes—Supply of Insulin.

In January the Ministry of Health authorised local authorities to supply insulin at a reduced price to persons suffering from diabetes who found the increase in the cost of insulin since the start of the war a financial burden. Arrangements have been made for supplies to be obtained through municipal health centres and at Bristol Royal Hospital.

Treatment of Venereal Disease (statistics page 35).

Before the outbreak of hostilities the Health Committee had under consideration proposals for the re-organisation of the scheme for the treatment and prevention of venereal diseases. The greatly increased incidence of these diseases re-opened the question of an extended service as a matter of urgency and on January 1st a new clinic was opened at Avonmouth for the treatment of seamen. Seventy-five per cent. of the capital and maintenance costs is borne by the Ministry of Health.

During the year the entire port administration has been re-organised to meet the increased war-time demands and a chief assistant port medical officer and an assistant port medical officer have been appointed full time. These medical officers in addition to the medical supervision of the port and airport regularly attend the docks V.D. clinic and have been provided for the latter purpose with the assistance of two trained male orderlies.

In 1942 the Council approved the erection of a special block at Southmead Hospital for the in-patient treatment of men, women and children suffering from venereal disease. This new block will be adjacent to, but staffed separately from the main hospital; it will provide for 26 male and 26 female in-patients and will include cubicle wards, consulting rooms, treatment rooms and day-rooms. The Ministry of Health are supplying the necessary hutting free and are contributing substantially towards the cost of erection (£5,577), two-thirds being subject to 75% grant. The cost of furniture and equipment is estimated to be £2,080 and the annual maintenance cost £14,930. Accommodation for the nursing staff will be provided in two maycrete huts, the cost of which, after allowing for government grant, is estimated at £469.

This provision for in-patients, which it is hoped will be completed in 1944 will be in substitution for the present beds maintained at Guardian House and the Royal Infirmary. It is proposed that in future Guardian House shall be administered directly by the Health Committee and will be utilised for out-patient treatment only. Facilities are available at Guardian House for female out-patients and in addition a special female out-patient department was established at Southmead Health Centre under a woman medical officer in June in the rooms which were originally designed for this purpose.

Two venereal disease welfare workers (male and female) have been appointed by the Council. They attend regularly at the various venereal disease health centres and work in close co-operation with the medical officers, health visitors and representatives of official and voluntary bodies concerned with social and moral welfare problems.

In October the assistance of U.S.A. nurses trained in venereal disease social work was offered by Lieut. Colonel Paul Padget of the Medical Service of the U.S.A. Army and their advice and assistance have been much appreciated.

Typhus Teams.

Two teams have been organised in this city to deal with any case of typhus fever. Each team consists of a medical officer, six nurses (two reserve), three sanitary inspectors, two ambulance drivers and two men to form a disinfecting party. In addition, one disinfestation team, consisting of eight men is stationed at the disinfecting station. All members of the team have received protective inoculation and clothing, and a plan of action has been worked out which will be adopted whether dealing with infected aircraft or ships.

Cancer Act, 1939.

In February a report was submitted to the Health Committee on the proposed scheme for the treatment of cancer. The main features are as follows:—

- (1) The Council will provide all necessary facilities so that every person in the city who is or is suspected to be suffering from cancer may obtain advice, and that every such person who is found to be suffering may obtain adequate treatment. In particular the Council will provide the facilities set out in the following paragraphs.
- (2) The Council will provide by agreement with the governing body of the Bristol Royal Hospital and at Southmead Hospital hospital treatment and where necessary in-patient accommodation for all persons in the city who are suffering from cancer.
- (3) The Council will pay to medical practitioners a fee of 2/6 for each Bristol case notified to the medical officer of health as cancer or suspected cancer.
- (4) The Council will provide facilities for consultation, including both diagnosis and medical observation after treatment, as follows:—
 - (a) Preliminary diagnostic centres at the Portway, Speedwell, Southmead, Central, Bedminster and Knowle health centres of the City Council or such other places as they may from time to time determine,

- (b) By agreement with the governing body of the Bristol Royal Hospital a consultative clinic at the Bristol Royal Hospital.

They will arrange for the attendance of medical practitioners at the preliminary diagnostic centres at such times as may be necessary and for the attendance of consultants at the consultative clinic. These facilities will be available for persons who are suffering or suspected to be suffering from cancer.

- (5) In addition to the general arrangements set out above, the Council may provide for the diagnosis and treatment of any individual case at such hospital or other institution and in such manner as seems desirable.
- (6) The Council will in such cases as they consider necessary pay all or any of the travelling expenses (including the travelling expenses of a companion) reasonably incurred by persons for the purpose of availing themselves of the services provided under these arrangements.
- (7) The Council will arrange for records to be kept, in such form as the Minister of Health may from time to time approve, of treatment provided under these arrangements and its results, and will send such records or copies thereof to any person for the time being designated by the Minister.
- (8) The Council will by such means as appear desirable give such publicity to these arrangements as they may think necessary for bringing them to the notice of persons to whom they may apply.

In August, after discussion with the Ministry of Health, the scheme had been informally approved by the Ministry subject to clause 3 relating to the payment of notification fees to general practitioners being deleted. The Ministry further wished the Council to consider whether a scheme could not be evolved under which Gloucestershire, Somerset, Wiltshire, Bath, Gloucester City and Bristol would set up a joint committee for the operation of a joint scheme. Under the Ministry's suggestion there would be a director paid jointly by all the local authorities interested charged with the control and direction of the scheme within the hospital.

A conference with representatives of adjoining authorities was held on 29th October to discuss the Ministry's suggestions. There was general opposition to a joint board with executive powers but it was suggested that representatives of local authorities concerned should be appointed on the sub-committee of the Royal Hospital dealing with cancer. It was agreed also that each local authority should appoint one representative with its medical officer of health to examine the schemes of the local authorities and discuss generally matters affecting the scheme.

Port Health.

This is the "first line" of defence of the public health service and of great importance not only to the city but to the country as a whole. Ceaseless efforts are made to prevent major infectious diseases from entering the country. Port medical officers and health inspectors are continuously on tidal duties throughout the year, and despite the close contact which the port has with countries where serious infectious diseases are present, no cases traceable through the port appeared in the city during the year. All ships from infected or suspected ports have been carefully inspected on arrival and kept under close observation during their stay. Foodstuffs passing through the port have been carefully inspected and close collaboration maintained with the various commodity officers attached to the Ministry of Food.

Crew Accommodation and Seamen's Welfare.

Maintenance of crew accommodation in good condition has been stressed in all cases found below standard. The co-operative efforts of the various authorities concerned have succeeded in remedying many matters needing attention.

A great deal has been done during the year to increase and modernise the accommodation provided for the general welfare of seamen during their short but well-earned respite in port. The Merchant Navy Club at Avonmouth, which is extremely popular and well patronised by seamen of all the allied nations, was erected by the National Service Hostels Corporation and opened to seamen in July, 1943.

The various societies catering for seamen's accommodation and comfort deserve praise for providing restaurants with snack bars, reading and writing rooms, bathing facilities, billiards and other indoor sports, concerts and cinema shows which are frequently held. Apart from the fact that there is a great need for these establishments, there is no doubt that their popularity is in no small measure due to the efforts of the Port Welfare Committee and other welfare organisations who are showing whole-hearted interest in making our seamen's leisure hours ashore as happy and comfortable as possible.

Deratisation of Ships.

The detection of rodent plague is one of the most important duties of the Port Health Authority. All vessels are thoroughly examined for rat indications and measures taken to prevent the introduction of bubonic plague included the pathological examination of 390 rats. The port sanitary regulations require that all foreign-going ships shall carry a deratisation or deratisation exemption certificate. These certificates are valid for six months and must then be renewed. During the year the number of certificates issued were as follows :—

Deratisation	...	...	...	24
Deratisation exemption	...	...	...	152

Deratisation was carried out by cyanide fumigation in every instance. In addition measures of rat repression were carried out on the docks, quays, wharves and warehouses. From the 3,126 rats destroyed 376 were submitted for pathological examination.

Dock Sanitation.

The sanitary conveniences in the dock area for male and female workers were regularly inspected for condition and adequacy and collaboration with the Dock Authority resulted in the erection of a number of new public conveniences during the year.

For smooth and efficient port health administration it is necessary to maintain close contact with a large number of officers including H.M. Customs, Docks Authority and Board of Trade, and thanks are due to them all for their ready co-operation. A separate abridged report has been prepared and sent to the Ministry of Health on the work of the Port Health Authority.

In conclusion, I wish to express my appreciation of the courtesy at all times extended to me by the Chairmen and members of the various committees of the Corporation, particularly to the Chairmen of the Health and Education Committees, and to the chief officers of the Corporation. Such assistance and co-operation have greatly facilitated the work of the department throughout a difficult year.

Finally, I wish to acknowledge my indebtedness to my fellow workers in the department for their loyal assistance throughout the war years.

I am, my Lord Mayor, Ladies and Gentlemen,

Your obedient servant,

R. H. PARRY,

Medical Officer of Health.

PUBLIC HEALTH DEPARTMENT,
BRISTOL,

June, 1944.

A.—VITAL STATISTICS.

Table 1.—Supplied by the Registrar General.

Population, marriages, births, deaths, natural increase, infant mortality,
for calendar year 1943 and previous four years.—Bristol.

	1943	1942	1941	1940	1939
Estimated civilian population (mid year)	370,800	362,200	360,150	411,400	419,200
Marriages.					
Number	3,123	4,131	4,125	5,099	4,860
Rate per 1,000 population ..	16.8	22.8	22.9	24.79	23.19
Births.					
Legitimate—males	3,369	3,164	2,614	3,180	3,106
females	3,082	2,956	2,516	2,973	2,929
Illegitimate—males	214	158	113	100	98
females	220	144	136	110	86
Total	6,885	6,422	5,379	6,363	6,219
Rate per 1,000 population ..	18.57	17.73	14.94	15.47	14.84
Stillbirths.					
Legitimate —males	101	123	88	117	133
females	97	96	82	103	108
Illegitimate—males	5	8	5	4	8
females	6	3	8	4	4
Total	209	230	183	228	253
Rate per 1,000 total births ..	29	34	33	35	39
Deaths.					
Males	2,327	2,203	2,841	3,176	2,576
Females	2,271	2,162	2,772	3,240	2,578
Total	4,598	4,365	5,613	6,416	5,154
Rate per 1,000 population ..	12.40	12.05	15.59	15.60	12.29
Natural increase per 1,000 population	6.17	5.68	<i>decrease</i> .65	<i>decrease</i> .13	2.55
Deaths under 1 year.					
Legitimate	290	221	253	336	240
Rate per 1,000 births	45	36	49	55	40
Illegitimate	23	14	37	22	21
Rate per 1,000 births	53	46	149	105	114
Total deaths	313	235	290	358	261
Rate per 1,000 births	45	37	54	56	42
Diarrhoea and enteritis— (under two years)					
Deaths	31	8	25	42	22
Rate per 1,000 live births ..	4.5	1.25	4.7	6.6	3.5
Maternal mortality.					
Deaths from puerperal sepsis ..	2	2	2	5	4
Rate per 1,000 births .. ..	.28	.30	.37	.76	.62
Deaths from other puerperal causes	8	11	5	13	15
Rate per 1,000 total births ..	1.13	1.80	0.92	1.97	2.31
Total deaths from puerperal causes	10	13	7	18	19
Rate per 1,000 total births ..	1.41	2.10	1.29	2.73	2.93

Table 2.—*Supplied by the Registrar General.*

Birth-rates, death-rates, infant mortality, maternal mortality and case-rates for certain infectious diseases in the year 1943.

(Provisional figures based on weekly and quarterly returns).

	Bristol	England and Wales	126 County Boroughs and great towns including London	148 Smaller towns (resident populations 25,000 to 50,000 at 1931 Census)	London Administra- tive County
Rates per 1,000 population					
BIRTHS :					
Live	18.57	16.5	18.6	19.4	15.8
Still	0.56	0.51	0.63	0.61	0.45
DEATHS :					
All causes ..	12.40	12.1	14.2	12.7	15.0
Typhoid and para- typhoid fevers	0.00	0.00	0.00	0.00	0.00
Smallpox ..	—	—	—	—	—
Measles ..	0.02	0.02	0.02	0.02	0.02
Scarlet fever ..	0.00	0.00	0.00	0.00	0.00
Whooping cough	0.00	0.03	0.03	0.03	0.03
Diphtheria ..	0.01	0.03	0.04	0.04	0.02
Influenza ..	0.29	0.37	0.36	0.37	0.27
Notifications :					
Smallpox ..	—	—	—	—	—
Scarlet fever ..	2.46	3.01	3.29	3.54	3.80
Diphtheria ..	1.02	0.88	1.12	0.77	0.74
Enteric fever ..	0.003	0.02	0.02	0.03	0.02
Erysipelas ..	0.31	0.31	0.35	0.27	0.42
Pneumonia ..	1.34	1.34	1.62	1.16	1.27
Measles ..	13.95	9.88	9.23	9.77	9.17
Whooping cough	0.95	2.54	2.82	2.25	2.68
Cerebro-spinal meningitis ..	0.07	0.08	0.10	0.06	0.09
Rates per 1,000 live births.					
Deaths under 1 year of age	45	49	58	46	58
Deaths from diarrhoea and enteritis under 2 years of age ..	4.5	5.3	7.9	4.4	10.4
MATERNAL MORTALITY:					
Puerperal sepsis	.29				
Others	1.14		Not	Available	
Total	1.45				
Rate per 1,000 total births (i.e. live and still).					
MATERNAL MORTALITY:					
Puerperal sepsis	.29				
Others	1.13				
Total	1.41	2.29			
NOTIFICATIONS :					
Puerperal fever	9.44	11.68	15.11	9.26	{ 3.05
Puerperal pyrexia }					
					15.23

Table 3.

*Compiled from figures supplied by Registrar General.***Total deaths by cause and age during the calendar year 1943—Bristol.**

CAUSES OF DEATH.	Sex	All Ages	0—1	1—5	5—15	15—45	45—65	65+
ALL CAUSES	M.	2,327	170	27	29	214	690	1,197
	F.	2,271	143	22	18	239	465	1,384
1. Typhoid & paratyphoid fevers	M.	—	—	—	—	—	—	—
	F.	1	—	—	—	1	—	—
2. Cerebro-spinal fever	M.	5	—	—	2	2	1	—
	F.	4	1	1	—	1	—	1
3. Scarlet fever	M.	—	—	—	—	—	—	—
	F.	1	—	1	—	—	—	—
4. Whooping cough	M.	—	—	—	—	—	—	—
	F.	1	—	1	—	—	—	—
5. Diphtheria	M.	5	1	1	2	1	—	—
	F.	—	—	—	—	—	—	—
6. Tuberculosis of respiratory system	M.	145	1	—	—	70	68	6
	F.	84	—	—	—	68	12	4
7. Other forms of Tuberculosis	M.	32	5	—	5	13	6	3
	F.	24	2	6	4	10	2	—
8. Syphilitic disease	M.	16	—	—	—	1	9	6
	F.	9	—	—	—	—	8	1
9. Influenza	M.	49	—	—	1	7	16	25
	F.	60	1	1	1	6	10	41
10. Measles	M.	2	—	2	—	—	—	—
	F.	4	3	1	—	—	—	—
11. Acute poliomyelitis & poli-encephalitis	M.	1	—	—	1	—	—	—
	F.	—	—	—	—	—	—	—
12. Acute infectious encephalitis	M.	3	—	—	—	1	2	—
	F.	1	—	—	—	1	—	—
13. Cancer of buccal cavity and oesophagus	M.	37	—	—	—	—	12	25
	F.	—	—	—	—	—	—	—
13. Cancer of uterus	F.	42	—	—	—	4	27	11
14. Cancer of stomach & duodenum	M.	70	—	—	—	6	20	44
	F.	74	—	—	—	5	29	40
15. Cancer of breast	M.	—	—	—	—	—	—	—
	F.	86	—	—	—	5	42	39
16. Cancer of all other sites	M.	240	—	2	2	15	99	122
	F.	193	—	1	3	16	75	98
17. Diabetes	M.	20	—	—	—	3	6	11
	F.	22	—	—	—	5	5	12
18. Intra-cranial vascular lesions	M.	185	—	—	—	1	46	138
	F.	289	—	—	—	2	49	238
19. Heart disease	M.	560	—	—	—	14	147	399
	F.	608	—	—	—	31	85	492
20. Other diseases of circulatory system	M.	54	1	—	—	5	18	30
	F.	52	—	—	—	2	10	40
21. Bronchitis	M.	167	1	—	—	1	50	115
	F.	136	1	—	—	6	13	116
22. Pneumonia	M.	150	30	6	1	14	48	51
	F.	118	24	3	1	8	23	59
23. Other respiratory diseases	M.	29	3	—	—	3	15	8
	F.	14	—	—	—	4	2	8
24. Ulceration of stomach and duodenum	M.	37	—	—	—	9	19	9
	F.	8	—	—	—	—	2	6
25. Diarrhoea (under 2 years of age)	M.	13	13	—	—	—	—	—
	F.	18	17	1	—	—	—	—
26. Appendicitis	M.	8	—	—	1	—	4	3
	F.	3	—	—	—	1	1	1
27. Other digestive diseases	M.	48	2	2	—	4	14	26
	F.	61	2	2	2	8	11	36
28. Nephritis	M.	60	—	—	—	5	16	39
	F.	50	—	—	1	11	16	22
29. Puerperal & post-abortion sepsis	F.	2	—	—	—	2	—	—
30. Other maternal causes	F.	8	—	—	—	7	1	—
31. Premature birth	M.	50	50	—	—	—	—	—
	F.	36	36	—	—	—	—	—
32. Congenital malformations, birth injury, infantile disease	M.	64	53	3	1	2	4	1
	F.	46	45	—	—	1	—	—
33. Suicide	M.	24	—	—	—	4	12	8
	F.	15	—	—	—	7	3	5
34. Road traffic accidents	M.	28	—	3	6	5	5	9
	F.	7	—	1	2	1	—	3
35. Other violent causes	M.	51	—	3	2	12	15	19
	F.	39	1	—	1	3	5	29
36. All other causes	M.	174	10	5	5	16	38	100
	F.	155	10	3	3	23	34	82

Table 4.

*Compiled from figures supplied by Registrar General.***Principle causes of death during calendar year 1943—Bristol.**

Death Rate per 1,000	DISEASE	Net deaths in 1943	% to total deaths
0.003	Typhoid and paratyphoid fevers	1	.02
0.024	Cerebro-spinal fever	9	.20
0.003	Scarlet fever	1	.02
0.003	Whooping cough	1	.02
0.013	Diphtheria	5	.11
0.618	Tuberculosis of respiratory system	229	4.98
0.151	Other forms of tuberculosis	56	1.22
0.067	Syphilitic diseases	25	.54
0.293	Influenza	109	2.37
0.016	Measles	6	.13
0.003	Acute poliomyelitis and polio-encephalitis	1	.02
0.011	Acute infectious encephalitis	4	.09
0.097	Cancer of buccal cavity and oesophagus	37	.80
0.113	Cancer of uterus	42	.91
0.388	Cancer of stomach and duodenum	144	3.13
0.231	Cancer of breast	86	1.87
1.167	Cancer of all other sites	433	9.42
0.113	Diabetes	42	.91
1.278	Intra cranial vascular lesions	474	10.32
3.150	Heart disease	1,168	25.40
0.285	Other diseases of circulatory system	106	2.31
0.817	Bronchitis	303	6.60
0.722	Pneumonia	268	5.83
0.116	Other respiratory diseases	43	.94
0.121	Ulceration of stomach and duodenum	45	.98
0.083	Diarrhoea	31	.67
0.029	Appendicitis	11	.24
0.293	Other digestive diseases	109	2.37
0.296	Nephritis	110	2.39
0.005	Puerperal and post-abortive sepsis	2	.04
0.021	Other maternal causes	8	.17
0.231	Premature birth	86	1.87
	Congenital malformations, birth injury, infantile disease	110	2.39
0.296	Suicide	39	.85
0.105	Road traffic accidents	35	.76
0.094	Other violent causes	90	1.96
0.243	All other causes	329	7.18
0.887	ALL CAUSES	4,598	
12.400			

Table 5.
Notifiable Diseases during 1943 (including Port cases). Local Figures.

NOTIFIABLE DISEASES.	NOTIFICATIONS.							REMOVED TO HOSPITAL		DEATHS.							Notified in each quarter.				Attack rate per 1,000.			
	At all ages.	At ages—years :						No.	%	All ages	At ages—years						1st	2nd	3rd	4th				
		Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65				65 and upwards	Under 1	1 to 2	2 to 5	5 to 15	15 to 25						25 to 45	45 to 65	65 and upwards
Diphtheria ..	378	6	77	176	88	25	5	1	374	98.6	5	1	..	1	2	1	..	..	..	107	82	69	120	1.02
Erysipelas ..	116	1	1	7	5	23	57	22	37	31.8	1	..	..	..	..	..	1	..	1	36	26	21	33	0.31
Scarlet fever ..	913	3	240	579	51	34	6	..	645	70.6	1	..	..	1	..	..	..	..	..	245	197	197	274	2.46
Enteric fever ..	1	..	..	..	..	1	..	..	1	100.0	..	..	..	..	..	..	..	..	..	..	..	..	1	0.003
Para-typhoid ..	3	..	..	2	..	..	1	..	1	33.3	1	..	..	..	..	..	..	..	..	..	2	1	..	0.01
Cerebro-spinal meningitis	27	1	7	7	5	5	2	..	21	77.7	7	..	..	1	2	2	1	1	..	13	7	2	5	0.07
Polio-myelitis ..	1	..	..	1	..	..	..	..	—	—	1	..	..	..	1	..	..	..	..	..	..	1	..	0.003
Pneumonia ..	496	37	85	74	36	92	102	70	257	51.2	279	62	3	5	3	4	18	73	111	137	78	55	226	1.34
Malaria ..	10	..	..	..	2	7	..	1	9	90	..	..	..	..	..	..	..	..	..	3	..	2	5	0.03
Dysentery ..	267	13	80	77	24	23	25	25	159	59.5	3	..	..	1	..	..	1	1	..	16	136	105	10	0.72
Encephalitis lethargica	2	..	..	..	1	..	1	..	1	50	3	..	..	..	..	1	1	1	..	..	..	1	1	0.005
Polio-encephalitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal pyrexia	63	..	..	..	25	38	..	..	5	7.9	..	..	..	..	..	..	..	..	..	17	17	10	19	0.17
Ophthalmia neonatorum ..	7	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	2	1	0.02
Measles ..	5,173	201	2,666	2,180	84	37	5	..	221	4.2	8	4	2	1	1	..	..	..	..	4,634	520	12	7	13.95
Whooping cough ..	354	38	223	80	9	4	..	..	41	11.5	1	..	..	1	..	..	..	..	..	72	98	114	70	0.95

Table 6.

Tuberculosis (including Port cases). Local Figures.

	CASES.														DEATHS.																
	At all ages	Under 1	1-5-	10-15-	20-25-	35-45-	55-65+	Quarters				Case rate	At all ages	Under 1	1-5-	10-15-	20-25-	35-45-	55-65+	Death rate											
								1st	2nd	3rd	4th																				
Pulmonary tuberculosis																															
Cases notified	550	1	4	12	16	74	100	130	84	72	42	15	133	137	141	139	1.65	231	2	1	..	15	21	53	43	46	38	12	0.62		
Other cases*	48	1	1	4	6	11	4	8	8	5	26	6	3	13															
Non-pulmonary tuberculosis																															
Cases notified	92	2	8	12	13	9	15	19	7	6	..	1	36	23	16	17	.33	74	8	13	7	8	13	6	2	4	3	0.20			
Other cases*	27	6	4	5	1	3	1	1	1	1	3	1	7	3	..	17															
Total 1943	717	10	16	29	31	90	122	161	96	87	53	22	202	169	160	186	1.98	305	10	14	7	3	22	29	66	49	48	42	15	0.82	
Total 1942	587	4	12	10	30	29	59	113	103	94	78	55	153	152	128	154	1.62	264	6	11	3	6	2	21	30	42	53	47	43	0.70	
1941	588	7	33	30	21	89	80	113	91	71	37	16	144	167	121	156	1.63	310	5	11	7	4	29	32	65	60	43	35	19	0.86	
1940	564	5	40	44	20	81	65	113	85	57	35	19	157	179	120	108	1.37	273	2	16	4	3	24	36	44	47	52	36	9	0.66	
1939	567	4	33	43	33	68	75	105	77	66	43	20	154	155	134	124	1.35	313	3	8	4	8	21	25	57	72	54	41	20	0.75	
1938	686	4	31	68	42	80	88	131	95	69	41	17	210	170	133	153	1.59	270	1	7	4	2	27	32	65	50	49	22	11	0.64	

* Cases coming to the knowledge of the M.O.H. otherwise than by notification.

Table 7.

1943.

INFANT MORTALITY.

Total 1942	CAUSE OF DEATH	Under one day	Under one week	Weeks			Total under one month	Months											Total 1943	Deaths in Quarters			
				1-2	2-3	3-4		1	2	3	4	5	6	7	8	9	10	11		1st	2nd	3rd	4th
..	Chicken pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..	..
..	Measles ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	Whooping cough ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
..	Diphtheria and croup ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	Erysipelas ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	Tuberculous meningitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..
..	Abdominal tuberculosis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	Other tuberculous diseases ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	Meningitis (Non-T.B.) ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	Convulsions ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	Bronchitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
43	Pneumonia (all forms) ..	..	..	5	8	1	14	12	8	9	4	3	2	3	1	3	2	1	..	1	1	15	15
..	Influenza ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16	..	16	1
8	Diarrhoea and enteritis ..	..	..	..	3	8	11	5	4	1	2	2	3	1	..	1	1	..	..	10	6	7	7
..	Gastritis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1	Suffocation, overlaying ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	Injury at birth ..	1	3	3	..	1	8	..	..	..	..	..	..	..	..	..	..	..	..	1	5	..	2
20	Atelectasis ..	8	18	1	..	..	27	..	..	..	..	..	..	..	..	..	..	..	..	8	6	3	10
36	Congenital malformations ..	9	8	9	5	..	31	6	2	1	1	3	..	..	..	1	..	..	..	17	9	13	8
72	Premature birth ..	40	21	10	8	4	83	5	..	..	..	..	..	..	..	..	..	..	..	47	22	24	21
4	Atrophy, debility & marasmus ..	1	..	5	2	3	11	2	1	..	1	..	1	..	..	..	..	..	..	16	2	8	1
32	Other causes ..	1	2	1	..	..	6	3	3	..	3	1	2	3	..	1	..	..	..	22	3	6	7
..	Found dead ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	Syphilis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
236	Totals ..	60	52	34	28	17	191	33	20	11	12	12	12	7	4	8	4	3	317	87	80	73	77

Table 8.
MATERNAL MORTALITY. Uncorrected Local Figures.

CAUSE OF DEATH	1936	1937	1938	1939	1940	1941	1942	1943—AGE GROUPS.						Total
								15—	20—	25—	30—	35—	40+	
Obstructed labour ..	—	—	—	—	—	—	1	—	—	—	—	—	—	—
Puerperal sepsis ..	7	4	3	4	4	1	—	—	—	—	—	—	—	1
Septic abortion ..	—	4	—	2	1	—	1	1	—	—	—	—	—	1
Abortion ..	—	1	3	—	—	—	—	—	—	—	—	—	—	1
Placenta praevia ..	—	1	1	—	—	—	—	—	—	—	—	—	—	1
Post-partum haemorrhage ..	2	2	2	6	1	—	4	—	—	—	—	—	—	2
Obstetric shock ..	5	2	3	—	4	1	—	—	—	—	—	—	—	1
Embolism ..	3	1	3	—	2	1	1	—	—	—	—	—	—	2
Puerperal toxæmia ..	—	4	4	4	4	—	3	—	—	—	—	—	—	4
Ruptured ectopic gestation ..	1	1	1	—	1	1	—	—	—	—	—	—	—	—
Eclampsia ..	1	4	2	5	3	1	2	—	1	2	—	—	—	5
Ruptured uterus ..	—	—	—	—	1	—	1	—	—	—	—	—	—	—
Intestinal obstruction ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chorea ..	—	—	1	1	—	—	—	—	—	—	—	—	—	—
Dystocia ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pulmonary oedema ..	—	—	—	1	—	—	—	—	—	—	—	—	—	1
Acute yellow atrophy ..	—	—	—	—	—	—	2	—	1	—	—	—	—	—
Total ..	19	24	23	23	23	5	16	1	4	3	7	3	2	20
Rate per 1,000 total births ..	3.10	3.85	3.65	2.93	2.83	1.33	2.49	—	—	—	—	—	—	2.65
Deaths in institutions ..	15	17	17	17	18	5	15	1	4	3	6	3	2	19
Age groups—														
15—20 ..	—	1	—	—	1	—	—	—	—	—	—	—	—	—
20—25 ..	3	4	4	4	4	—	4	—	—	—	—	—	—	—
25—30 ..	4	7	6	4	10	2	4	—	—	—	—	—	—	—
30—35 ..	4	5	4	9	4	2	3	—	—	—	—	—	—	—
35—40 ..	4	5	8	4	4	1	4	—	—	—	—	—	—	—
40+ ..	4	2	1	2	—	—	1	—	—	—	—	—	—	—

B.—DEPARTMENT OF PREVENTIVE MEDICINE.

Table 1—Pathological and Bacteriological Examinations.

1942		1943
	<i>Swabs.</i>	
85	K.L.B. Primary	166
9,173	Culture	10,348
17	Virulence	7
2,015	Haemolytic streptococci	2,438
437	Other organisms	275
	<i>Sputa.</i>	
1,680	Tuberculosis	2,277
339	Other organisms	191
3	Pneumococcal typing	1
7	Malignant cells	9
—	Elastic fibres	4
3	Vaccine	—
	<i>Blood.</i>	
995	Blood counts	300
672	Differential counts	745
131	Haemoglobin counts	1,176
76	Reticulocytes counts	77
12	Platelet counts	10
139	Sedimentation rate	291
16	Bleeding time	15
16	Coagulation time	15
33	Blood culture	32
62	Van den bergh	46
18	Sugar tolerance	13
—	Sulphonilamides	36
430	Urea	581
130	Sugar	95
85	Agglutination	82
—	Pneumococci	4
1	Uric acid	2
28	Films for malaria	41
37	Paul bunnell	43
4	Grouping	8
7	Sodium chlorides	4
6	Icterus index	3
11	Fragility	13
1	Lead poisoning	1
14	Ascorbic acid	15
3	Calcium	4
1	Cholesterol	1
3	Phosphatase	16
5	Plasma proteins	7
—	Leishman donavan bodies	1
—	Measles serum for injection	3
1	Sodium	—
5	Phosphorus	—
18	Bilirubin	—
1	Urobilin	—
1	C.O. ₂ combining power	—
1	Oxidase test	—
1	Guinea pig inoculation	—
1	Sternal puncture	—
	<i>Stomach Contents.</i>	
1,602	Test meals	1,753
	<i>Faeces.</i>	
224	General	227
393	Enteric	463
35	Food poisoning	144
1,156	Dysentery	3,114
9	Amoebic dysentery	12

Pathological and Bacteriological Examinations—continued.

1942		1943
	<i>Faeces—continued.</i>	
31	Tuberculosis	51
237	Occult blood	335
8	Fat	18
—	Bilirubin	5
1	Protozoa	16
—	B. Aertrycke	3
4	Urobilia	3
3	Bile	—
	<i>Urine.</i>	
1,567	Routine	1,540
1,379	Culture	1,483
73	Friedman	80
295	Urea concentration	376
27	T.B.	48
10	Inoculation for T.B.	30
16	Enteric	15
4	Amoebic dysentery	1
441	Ascorbic acid	161
6	Chlorides	2
90	Water clearance	3
2	Red blood cells	1
38	Sugar	43
—	Sugar tolerance	3
8	Urobilin	1
6	Bilirubin	32
26	Acetone	2
—	Bence jones protein	3
—	Lead poisoning	2
—	Weil felix	1
—	Acetyl salicylic acid	1
2	Diastase	3
—	Bilhazia	1
—	Tryosine	1
4	Water dilution	—
135	Specific gravity	—
9	Acid	—
7	Bile	—
1	Sodium benzoate	—
3	Pus	—
1	Albumen	—
1	Static albuminura	—
1	Spirochaetes	—
1	Br. abortus	—
9	Hippuric acid	—
	<i>Pus.</i>	
107	... ..	111
	<i>Fluids.</i>	
183	Cerebro spinal fluids	198
141	Pleural and other fluids	138
	<i>Histology.</i>	
241	Human tissues	296
6	Animal tissues	28
	<i>Post Mortems.</i>	
99	... ..	92
	<i>Waters.</i>	
302	Bacterial counts	137
—	Differential counts	14

Pathological and Bacteriological Examinations—continued.

1942		1943
814	<i>Rats.</i>	799
4	<i>Mice</i>	—
	<i>Milks.</i>	
766	Tuberculosis	803
361	Accredited	218
448	Pasteurised bact.	277
279	Pasteurised chemical	241
297	Phosphatase	192
52	Pasteurising plants	28
1	Haemolytic streptococci	—
1	Ice cream	—
71	Churn rinses	22
30	Milk bottle rinses	79
23	Milk for organisms	—
3	Milk straws	—
	<i>Venereal Disease.</i>	
4,147	Blood for wassermann reaction	6,115
3,930	„ „ kahn	5,814
—	C.S. Fluid for wassermann reaction	7
1,565	Complement fixation tests for gonorrhoea	2,737
7,420	Films for gonococci	10,719
288	Cultures for gonococci	887
4	C.S. Fluids for cells	12
5	„ „ chemical	11
25	„ „ lange	52
—	Special complement deviation tests	5
—	Fluid for spirochetes	8
1	Urine for gonococci	—
80	<i>Foodstuffs.</i>	82
	<i>Specific Investigations.</i>	
—	Tuberculin	10
—	Vaccines	6
—	Whooping cough plates	19
—	Fluids for inoculation	2
1	Fluids from b. pestis	1
—	Breast milk	6
—	Gastric contents	1
2	Antral washings	6
1	Hand washings	1
—	Sternal puncture	1
3	Vomit	5
1	Hair for ringworm	5
—	Scales for ringworm	3
—	Scale of shin	1
—	Finger nail	1
—	Wart	1
—	Swab for trichomonas	1
2	Shaving cream	8
1	Canine teech	—
4	Duodenal juice	—
1	Bacillus leprae	—
1	Leaflets	—
1	Pink substance	—
5	Smears for trichonomas	—
4	Tattooing materials	—
1	Tape worm head	—
44,408	Totals	59,567

C.—CLINICS.

Table 1—Maternity and Child Welfare.

1942		1943
	(a) <i>Notifications—</i>	
6,844	Live Births —	7,277
296	Still Births	265
74	Confinements at Home—by Doctor ...	69
2,185	by Midwife —	2,087
4,881	Confinements at Institutions	5,386
	(b) <i>Forms of Maternity Assistance Granted—</i>	
2,140	Midwives Fees —	2,036
4	Consultant Obstetricians	2
243	Dentures	301
7	Spectacles	3
1	(c) <i>Midwives Claims for Compensation—</i>	—
386	(d) <i>Fees claimed by Medical Practitioners—</i>	390
	(e) <i>Municipal Midwives cases completed—</i>	
1,318	(a) as Midwife	1,452
362	(b) as Maternity Nurse	382
38,511	Nursing Visits	20,578
	Other Visits	9,574
	(f) <i>Attendances at Clinics—</i>	
	(i) <i>Municipal Ante-natal</i>	
2,135	Verrier Road —	2,210
3,281	Bedminster	2,819
1,551	Brislington	1,542
1,915	Knowle West	1,966
3,853	North Bristol	3,574
1,293	Portway	1,377
3,912	Central —	4,397
2,790	South Bristol	3,256
4,770	Southmead	4,173
3,638	Speedwell	3,806
29,138		29,120
24.5	Average per session	25.4
4,707	New Patients	4,753
8,014	Midwives anti-natal sessions	8,354
	(ii) <i>Post Natal Clinics—</i>	
604	Central	661
2,062	Bedminster	523
	Speedwell	753
	Southmead —	693
	Portway —	67
	Knowle	8
2,666		2,705
12.7	Average per session	12.6
1,347	New Patients	1,298

Maternity and Child Welfare—continued.

1942		1943
4,800	(iii) <i>Consultative Ante-Natal Clinics</i>	4,921
	(iv) <i>Municipal Infant Welfare Centres—</i>	
	Mothers—	
5,171	Central	4,663
6,582	Speedwell	7,966
6,038	Southmead	6,688
3,480	Portway	3,547
4,736	Knowle West	5,357
3,546	South Bristol Baths	3,506
4,441	Bedminster	3,990
34,264		35,717
31.	Average attendance per session ...	37.2
	Children under 1 year—	
3,575	Central	3,714
5,146	Speedwell	6,561
4,762	Southmead	5,418
2,383	Portway	2,685
3,337	Knowle West	3,952
3,053	South Bristol	3,009
3,221	Bedminster	3,051
25,477		28,390
23.7	Average attendance per session ...	29.6
	Children between 1 and 5 years—	
1,899	Central	1,165
2,053	Speedwell	1,681
1,717	Southmead	1,704
1,357	Portway	1,150
1,592	Knowle West	1,552
933	South Bristol	604
1,298	Bedminster	1,199
10,849		9,055
11.1	Average attendance per session ...	9.4
	New Patients—	
2,395	Children under 1 year	2,503
274	Children between 1 and 5 years	229
	(v) <i>Voluntary Infant Welfare Centres—(13)</i>	
23,144	Mothers	25,925
31.3	Average attendance per session ...	35.2
14,379	Children under 1 year	19,164
20.3	Average attendance per session ...	26.
9,240	Children between 1 and 5 years	8,946
13.	Average attendance per session ...	12.1
	New Patients—	
1,184	Children under 1 year	1,986
210	Children between 1 and 5 years	267
	(vii) <i>Birth Control—</i>	
72	Attendances	78

Maternity and Child Welfare—continued.

1942		1943
	(viii) <i>Minor Ailments</i> —	
3,222	Inspection	3,198
11,666	Treatment	11,251
1,802	New Patients	1,980
—	Ante and Post Natal Exercises	224
	(xi) <i>Other Special Clinics</i> —	
342	Attendances	105
81	New Patients	11
	(g) <i>Health Visitors' Visits</i> —	
6,143	Notified Births—Primary	6,579
10,504	under 1 year	14,349
24,987	1 to 5 years	26,661
687	Eye Cases	516
75	Ophthalmia Neonatorum	25
—	Summer Diarrhoea	1
293	Ante-Natal	587
114	Neo-Natal deaths	88
3,899	Other Special Visits	6,038
12,939	Blank Visits	14,254
5,822	Municipal Clinics	6,513
517	Schools for mothers	501
39	Tuberculosis	1,934
44	Blank Visits	776
1,070	Sessions at Nursery Classes	905
	(h) <i>Visits by Inspector of Midwives and Nursing Homes</i> —	
14	Mental Deficiency	—
631	Midwives Acts	790
183	Blank Visits	235
44	Nursing Homes	62
28	„ „ (special)	31
	(i) <i>C.M.B. Forms</i> —	
1,281	A. Medical Help	1,410
8	B. Death	12
41	C. Stillbirth	37
11	D. Laying out the Dead	26
47	E. Liability of Infection	60
72	F. Artificial Feeding	70
	(j) <i>Infant Life Protection</i> —	
1,142	No. of Visits	1,020
	Children under supervision at end of period	70
5	Removed from Register at age limit	8
42	Transferred to relatives	24
16	Legally adopted	12
5	Removed for other reasons	8
48	Persons registered as receiving children	38

Table 2—Sunlight Treatment.

1942				1943		
Central Clinic	South-mead (out patients)	Total		Central Clinic	South-mead (out patients)	Total
73		73	Chest :—			
1069		1069	Patients attendances.	83		83
				1441		1441
473	100	573	School :—			
4836	1484	6320	Patients	516	84	600
			attendances. ...	5497	2396	7893
513	80	593	M. & C. W.			
5982	901	6883	Patients	679	48	727
			attendances ...	8133	1758	9891
			Others :—			
			incl. short wave etc			
13		13	Patients		224	224
201		201	attendances ...		5031	5031

Table 3—Eye Clinics.

1942			1943	
New Patients	Attendances		New Patients	Attendances
1404	5225	School Children	1233	5093
89	415	Infants	76	245
49	56	Adults	54	68
1542	5696		1363	5406

Table 4—Orthopaedic Department.

1942		Treatment ;—	1943	
Patients	Attendances		Patients	Attendances
24	490	M. & C. W. ...	43	867
311	5843	School	328	5768
335	6,333	Totals ...	371	6,635
1942		Inspections :—	1943	
Patients	Attendances		Patients	Attendances
111	194	M. & C. W. ...	195	288
753	1299	School	860	1355
115	162	Chest	123	212
979	1,655	Totals ...	1,178	1,855

Table 5—Dental Department.

1942			Service	1943		
Schools	Expectant Mothers & Nursing Mothers	Infants		Schools	Expectant Mothers & Nursing Mothers	Infants
31646	1143	590	Inspected	27621	1132	594
20411	1143	590	Requiring Treatment	17790	1131	590
17282	1182	673	Treated	16141	1181	629
26534	2936	891	Attendances	25127	3075	883
			Fillings :—			
10147	701	—	Permanent Teeth	10015	635	—
1128	—	205	Temporary „	664	—	214
			Extractions :—			
4857	5785	—	Permanent Teeth	4339	4881	—
20296	—	1370	Temporary „	18745	—	970
11088	1435	600	Anesthetic Gas	10643	1248	427
			Other Operations			
5383	758	—	Permanent Teeth	4028	690	—
582	—	137	Temporary „	479	—	161

Table 6—Ear, Nose and Throat Department.

1942		Inspections	1943	
Patients	Attendances		Patients	Attendances
99	128	M. & C.W. ...	43	48
1,014	1,835	School ...	631	1,528
75	124	Chest ...	69	119
1,188	2,087	Totals ...	743	1,695
		Treatment		
43	359	M. & C.W. ...	22	231
304	5,627	School ...	203	4,980
347	5,986	Totals ...	225	5,211

Table 7—X-Ray Department.

1942				1943		
Film	Screen	Total		Film	Screen	Total
3,012	663	3,675	<i>Central Health Clinic—</i>			
392	—	392	Chest ...	4,508	1,098	5,606
493	—	493	„ G.P's ...	742	—	742
367	—	367	Schools ...	484	—	484
39	—	39	M. & C. W. ...	680	—	680
			Others ...	95	—	95
4,303	663	4,966	<i>Southmead Hospital—</i>	6,509	1,098	7,607
786	80	866	Out-Patients ...	2,427	102	2,529
5,089	743	5,832	Totals ...	8,936	1,200	10,136

	Mayor's Paddock Baths		Central Health Clinic		Southmead Hospital		Avonmouth		Totals	
	1942	1943	1942	1943	1942	1943	1942	1943	1942	1943
Children ...	4,606	3,164	2,634	2,221	699	947	—	233	7,939	6,565
Infants ...	1,044	864	817	752	206	237	—	41	2,067	1,894
Adults—										
Females ...	2,008	1,980	2,083	1,938	319	569	—	236	4,410	4,723
Males ...	2,301	2,345	—	—	—	—	—	150	2,301	2,495
Total Attendances	9,959	8,353	5,534	4,911	1,224	1,753	—	660	16,717	15,677
New Patients—										
Children ...	2,238	1,609	1,359	1,109	330	370	—	109	3,927	3,197
Infants ...	548	494	407	403	62	96	—	21	1,017	1,014
Adults—										
Females ...	1,105	1,093	1,138	1,034	162	250	—	146	2,405	2,523
Males ...	1,313	996	—	—	—	—	—	93	1,313	1,089
Total New Patients	5,204	4,192	2,904	2,546	554	716	—	369	8,662	7,823

Included in "Total Attendances."

Table 9—Dispensary.

(1) Establishments served—	1943
Central Health Clinic	
Health Centres and Clinics (11)	
Hospitals and Institutions (17)	
Day Nurseries, Special Nursery	
Schools and Classes (61)	
Municipal Midwives (30)	
Social Welfare District Medical Officers	
(2) Turnover of Drugs, Dressings, etc.—	
Quantity of mixtures made ... Gallons	3,000
" ointment made ... lbs.	2,000
Vit. A & D Emulsion ... gallons	228
Vit. A & D Capsules ... caps.	138,000
Whooping Cough Vaccine (20 cc vials)	27
A.P.T. Diph. Proph. (5 cc vials)	3,500
Other Medicines ... lbs.	1,000
Lint and Cotton Wool ... gallons	30
" ... lbs.	1,113
(3) Bulk purchase of Drugs—	
... cwts.	30
... gallons	380
... tabs.	40,000

Table 10—Immunisations, Vaccinations, etc.

1942		1943
	(i) <i>Diphtheria</i> .—Number of immunisations completed at Schools 10608 and Clinics Nurseries 3153, General Practitioners 946, during the year.	
3,896	Full course—Ages 0—5 years	4,854
6,377	Ages 5—15 years	6,430
—	Booster dose—5 years & over	3,423
10,273		14,707
	Estimated percentage of child population immunised	
	Ages 0—5	50%
	" 5—15 "	70%
47	(ii) <i>Typhoid Fever</i> .—	
92	Number of persons inoculated	10
	" " injections given	19
2,244	(iii) <i>Vaccination</i> .—	
	The number of vaccination certificates received during the year.	1,793
		(Provisional)

Table 11—Chest Clinic.

1942		1943
1,571	New Patients—adults	2,196
600	children	848
4,290	Attendances—adults	4,856
1,990	children	2,430
3,669	Re-examinations—adults	3,801
1,046	children	976
	Home Visits—	
236	Doctors	396
1,834	Nurses	1,965
329	Injections	572
663	Artificial pneumothorax refills	1,203
1,069	Ultra-violet light cases	1,441
162	Orthopaedic surgeon	212
124	E.N.T. Surgeon	119
4,067	X-rays	6,348
520	Sputum examinations	1,192
37	Personal consultations	40
	Admissions to Institutions :—	
693	Adults	767
163	Children	261
	Cases on Register at end of year—	
2,931	Pulmonary	3,154
1,030	Non Pulmonary	1,053

Table 12—Tuberculosis Welfare Dept. (Commenced 1st June, 1943).

	1943
Allowances in cash.	
Total applications granted :—	
(a) Maintenance	214
(b) Discretionary (also incl. in (a)	46
(c) Special Payments (13)	24
Patients in receipt of allowances at end of year ...	150
Allowances in kind.	
Free Milk grants—new cases	28
" " " —renewals	57
Total patients in receipt of milk grant at end of year ...	31
Allowances in kind—per Voluntary Care Committee ...	28
Rehabilitation.	
Patients introduced to Training Centre	—
Successfully introduced to employment	—
(a) Part-time	—
(b) Full-time	—

Table 13—Venereal Diseases.

1942 Guardian House	Clinics	Guardian House	1943 Avon- mouth	South- mead
1,881	<i>New Patients</i>	1,783	1,055	192
512	Syphilis	411	197	55
18	„ (congenital, includ. above)	18	1	12
39	Soft Chancre	8	7	—
679	Gonorrhoea	439	284	52
651	Non-Venereal	925	567	85
2,713	<i>Total Patients</i>	1,801	1,055	224
42,027	<i>Total Attendances</i>	48,418	4,818	2,119
17,968	Individual attention by Medical Officer	30,573	3,242	2,119
24,059	Investigation, Dressings, etc.	17,845	1,576	—
1,421	<i>Under treatment end of year</i>	802	66	122
720	Syphilis	440	31	40
9	Soft Chancre	3	2	—
638	Gonorrhoea	337	15	32
54	Non-Venereal	22	18	50
132	<i>Inpatients</i>	87	—	—
4,121	<i>Inpatient days</i>	2,543	—	—

V.D. Diagnostic Clinic.

1943

Total Attendances **234**
New Patients **234**

Table 14—V.D. Welfare Dept. (from 1st Nov. 1943).

	M.	F.
Number of cases on Welfare Officers' Register	899	650
Number of new cases added during month	238	138
Primary cases :—(a) Interviewed	52	50
(b) First visits	16	16
(c) Repeat visits	9	5
(d) Examined after persuasion	8	10
Old cases :—(a) Interviewed	4	10
(b) First visits	1	7
(c) Repeat Visits	—	—
(d) Examined after persuasion	1	5
Follow up after failure to complete treatment		
(a) Visits	90	52
(b) Re-commenced treatment after persuasion	63	43
Attendances at Clinics	31	34
Number of consultations with Voluntary bodies	16	17
Number of visits for other specified purposes (for patients)	20	18
Total visits for all purposes	140	112
Regulation 33B (included in above figures)		
(1) Total number for whom Form 1 was received	12	22
Form 1 sent to M.O.H. other districts	15	3
(2) Number in (1) persuaded to be examined before named on second Form 1		
(a) Contacts found	13	12
(b) Contacts examined	9	9
(3) Number in (1) for whom 2 or more Forms 1 were received	1	3
(4) Number of those in (3) who were		
(a) found	1	2
(b) examined after persuasion	—	—
(c) served with Form 2	—	1
(d) examined after service of Form 2	—	1
(e) prosecuted	—	—
Rehabilitation.		
(a) Successfully introduced to employment	—	—
(b) Successfully introduced to club or other suitable organisation	6	5

D.—HOSPITALS, INSTITUTIONS AND NURSERIES.

Table 1—Hospitals.

Beds Occup'd 31:12:42		Beds Provided	No. Admitt.	Births (Live)	No. Disch.	No. of deaths	No. of beds occupied 31:12:43	Waiting List
303	Southmead—							
152	General ...	385	3,747		3,097	739*	372	122
28	Maternity ...	152	3,176	2,453	5,471		150	—
	T.B. ...	32	124		89		28	—
—	Cedar Hall—	20	321	295	311		20	—
	Snowdon Rd.—							
263	General ...	264	387		209	198	243	—
20	T.B. ...	25	91		46	42	23	—
	Ham Green—							
162	T.B. ...	160	364		289	70	168	10
209	Fevers, etc....	340	2,489		2,503	56	139	—
	Charterhouse—							
34	T.B. ...	50	74		73	6	29	—
14	Fevers, etc....	62	395		397		12	—
89	Frenchay San.—	106	244		233		100	22
57	Winsley San.—	58	87		83	3	58	9
9	Other T.B. Insts.		39		31	8	9	—
	Totals ...	1,654	11,538	2,748	12,832	1,157	1,351	163

These figures include treatment of service sick and service casualties including civilian war casualties, details of which may not be indicated.

*Including 9 Maternal deaths (4 Bristol 5 Outside City cases)

Table 2—Ambulances.

1942			1943	
No. of Ambulances	No. of Removals		No. of Ambulances	No. of Removals
2	2,318	Infectious Diseases Ambulances ...	2	3,826
2	1,964	Southmead General Ambulances ...	1	Used only for stand by for night duty

Table 3—Nurseries.

No. of Places occupied 31-12-42		Places Provided 31-12-43	No. Admitt.	No. Disch.	No. of deaths	No. of Places occupied 21-12-43	Waiting List	
302	(i) Residential	No. (13)	291	457	409	1	266	35
376	(ii) Day ...	(18)	705	961	740	—	531	230
256	(iii) Residential (adm. by Education Committee) 2-5 yrs.	(7)	249	165	218	—	203	15

Table 4—Daily Guardian Scheme. (Scheme inaugurated January, 1942).

1942		1943
194	No. of Guardians registered ...	334
144	„ „ with babies ...	290
223	„ Babies registered ...	382
184	„ Babies placed with Guardians ...	337

E.—SANITATION, HOUSING, SHOPS ACTS etc.

Table 1—Sanitary Inspectors.

1942		1943
	<i>Sanitary Inspectors—</i>	
21,674	Visits	21,164
303	Notices	334
288	Notices complied with	247
	<i>Work Done—</i>	
31	New drains laid	41
376	Tests made	367
152	Drains repaired	191
364	Choked drains cleared	314
38	Flushing appliances introduced	45
86	New pans fitted	75
8	Additional W.C's	2
50	Other W.C. repairs, etc.	81
—	Cesspools abolished	—
—	Water supplies installed	1
—	Wells closed	—
	<i>Work Done on Dwelling Houses—</i>	
100	Roofs repaired	156
239	Other new work	375
68	Premises cleansed	75
8	House treated for dampness	23
1	Lighting improvements	3
6	Ventilation improvements	1
34	New sinks fixed	7
4	Washing convenience installed	—
1	Food storage, etc.	—
7	Geyser vents, etc.	2
6	Heating apparatus	—
8	Lavatory basins	5
—	Meal rooms	1
1	Other work in shops	—
1	Overcrowding abated	—
—	Underground rooms closed	18
116	Other nuisances abated	203
10	Aged and infirm persons removed	1
—	Smoke observations	3
—	Smoke infringements	—
	<i>Housing Acts.</i>	
—	Houses repaired	—
	<i>Public Health Acts.</i>	
1,850	Houses inspected	2,637
4,435	Inspections made	2,952

Table 2—Dairies, Milkshops, etc.

1942		1943
	<i>Registered at end of period—</i>	
239	Dairies (City)	212
—	„ (O/City retailing within City)	140
903	Milkshops	731
56	Cowsheds	55
	Personal registrations	1,138
	<i>Licences under Milk (Special Designations) Order, 1936.</i>	
	<i>Tuberculin Tested—</i>	
2	To produce	2
—	To produce and bottle	—
8	To bottle and sell	9
21	To sell only	17
4	Supplementary	2
	<i>Accredited—</i>	
7	To produce	8
1	To produce and bottle	1
2	To bottle	—
9	To sell	—
4	Supplementary	3
	<i>Licences under Milk (Special Designations) Order, 1936.</i>	
	<i>Pasteurised—</i>	
11	To produce and sell	12
53	To sell	55
2	Supplementary	2

1942			1943	
No. taken	No. Not complying		No. taken	No. Not complying
		<i>Samples taken—</i>		
174	59	Pasteurisation test ...	195	15
827	—	Tubercule Examinati'n	827	—
125	48	Tuberculin Tested ...	49	16
119	52	Pasteurised	58	14
226	55	Accredited		
		Test samples at	137	26
260	115	Institutions ...	206	41

Table 2—Dairies, Milkshops, etc.—continued.

1942		1943
	<i>Other samples—</i>	
1,074	Food and Drugs	990
2	Ice Cream	—
183	Others	136
	<i>Visits—</i>	
969	Dairies	1,105
129	Milkshops	167
241	Cowsheds and Farms	318
136	Corporation Institutions	142
102	Schools	202
—	Food Poisoning	—
—	Food Premises	—
—	Premises damaged by enemy action	—
3,620	Others	3,927
	<i>Premises—</i>	
3	Cleansed	7
	Other defects remedied	8
	Plants installed—(sterilizing)	2
	<i>Drainage—</i>	
2	New Drains	2
	Repairs and clearance	2
	<i>Water Closets—</i>	
2	Other repairs and Cleansing	2
	Notices—Verbal and written	58
	„ Complied with	65

Table 3—Inspection of Meat and other Foods.

1942		1943
	<i>Visits—</i>	
1,340	Meat Markets	933
635	Shops	806
5	Cattle Markets and Railway Sidings	12
—	Fish curing premises	—
24	Sausage making premises	32
—	Cold stores	—
—	Connection with food poisoning	—
—	Street traders	—
40	Institutions	63
1,268	Slaughterhouses	1,301
—	<i>Slaughterhouses cleansed—</i>	—
—	<i>Slaughterhouses rebuilt, repaired or altered—</i>	—
—	<i>Sanitary defects, etc., remedied—</i>	—

1942		1943	
City	Abattoir	City	Abattoir
			<i>Animals examined—</i>
6,098	10,745	8,113	10,826
3,811	3,903	6,566	3,651
35,563	55,067	35,218	40,916
12,983	1,575	17,840	771
5,422	—	469	—
			<i>Carcases destroyed—</i>
159	194	196	236
5	8	3	3
77	46	45	15
20	30	20	8

Table 3—Inspection of Meat, etc.—continued.

1942		1943
Tons		Tons
109	<i>Meat destroyed from—</i>	
—	Slaughterhouses and Shops ...	134
95	Cold Stores	—
92	Abattoir	104
	Fish, Poultry, Vegetables, etc. ...	56

Table 4—Disinfections, Drain Tests, etc.

1942		1943
7	No. of vans	8
10,318	No. of disinfections	12,197
212,914	Articles disinfected	226,757
759	„ destroyed	1,087
59	Fumigations by sulphur ...	65
313	Sprays	408
	Baths—	
218	{ Vermin	115
	{ Other	223
	<i>Drain Tests—</i>	
4	Water	15
245	Smoke	198
25	Colour	14
58	Chemical	38

Table 5—Rat Repression. City.

1942		1943
1,049	No. of complaints received	1,299
97	No action required	191
	Infestation cleared—	
793	(a) by Corporation services	998
53	(b) by occupiers	12
92	No. under routine service (Contracts) ...	62
14	No. complaints outstanding at end of year ...	36
1,049		1,299
	No. of Notices served :—	
292	(a) Informal	1,229
2	(b) Formal	1
3,477	Rats caught	4,123
1,819	Mice caught	2,051
124	Rats to University for examination	120

Table 6—Shops Acts and Young Persons.

1942		1943
	(a) <i>Shops Acts</i> —	
2,272	No. of shops visited ...	4,141
1,147	Revisits	856
638	Infringements	526
42	Assistants' facilities improved	36
123	Verbal warnings	69
6	Warning letters	—
—	Prosecutions	—
—	Convictions	—
	(b) { <i>Visits to Cinemas</i> <i>Shops Acts and Sunday</i> <i>Entertainment—</i>	
96	Visits and Revisits	44
39	Infringements	14
	(c) <i>Young Persons (Employment</i> <i>Act) 1938—</i>	
104	No. of visits	10
58	„ revisits	13
32	„ infringements	9
17	„ verbal warnings	9
78	(d) Unsatisfactory condition report to C.S.I.	33

LECTURES BY MEDICAL OFFICER OF HEALTH.

(Reported by the *Bristol Mercury* and *Daily Post* in 1880).

LECTURE A

Mr. D. Davies, M.R.C.S., the Medical Officer of Health of the Bristol Sanitary Authority, is delivering a course of lectures on "Hygiene" to the students of the Bristol Medical School at the institution, in Tyndall's-park. The first address was given on February 9th, and its subject was "*Human Habitations.*" Mr. Davies said the subject he had to treat of was as yet in a very chaotic state. Assertions and opinions they had in abundance, but comparatively little real knowledge. Much that had been taught was no better than superstition, and much that fairly claimed their respect could as yet be considered as only guesses at truth. It had been alleged, and he believed with some degree of truth, that the sanitary action of the last few years had not produced a tangible result in the absolute returns of mortality. When, however, they considered the increase of the population and the crowding of that population in large towns of limited areas, the increased struggle for existence, and the consequent over tension of the nerve and muscle, he thought the fact that they had not retrograded was a sufficient proof of the good result of hygienic measures. Passing on to consider the question of what human habitations ought to be, Mr. Davies observed that the first point to consider in a house was the site on which it stood. It was not only important, but absolutely necessary, to the health of the inmates that the site on which the house stood should be dry. Observation, with the assistance of such authorities as Dr. Hunter and Dr. Buchanan, had led him to the conclusion that the prevalence of phthisis was greatly due to a damp subsoil, damp floors, and overcrowded cottages, and he might here mention that Dr. Buchanan had conclusively shown that phthisis had decreased in Bristol since the formation of their new sewers and drains which had drained the subsoil. The next important point in the site of a house was proper distance from ground emitting malarial influences. As to the nature of the ground on which the house was to stand, the best was a solid dry rock, next to this, a dry sandy soil of any formation, and the worst of all impermeable clay, which retained all the fluids falling on it. In or near large cities the question often arose as to the safety of using town ashes mixed with a considerable amount of vegetable, and frequently some animal matter as a site. The public opinion of the safety of such foundations on the score of health was on the whole, as he took it, unfavourable, but after diligently searching for evidence on this point he had not been able to find a particle of reliable evidence that such foundations for houses were unhealthy after they had thoroughly settled—say for two years. He would here seriously warn them not to be carried away by the popular views regarding the supposed baneful effects of decomposing animal and vegetable matter. Having secured a site perfectly dry and with a low water level, and not exposed to malaria of any kind, they should secure that the site should be so exposed to currents of air on all sides as to be constantly surrounded by fresh unexhausted air, and it should be so situated as to secure the greatest possible amount of sunshine. Excepting overcrowded and unventilated bedrooms and a damp sub-soil, nothing conduced more to the development of tubercle than the absence of light in dwellings. Beneath the foundation of the walls there should be an impermeable waterproof course so as to effectually preclude the ascent of any dampness to the walls by capillary action. He was sorry to say this was often overlooked and neglected by competent builders, and the consequent dampness of walls and floors, he felt convinced, was one of the causes conducive to the prevalence of phthisis. To make sure that no damp should arise from the ground it was advisable when practicable to cover the whole of the foundation with a waterproof layer such as asphalt or concrete, and in towns, especially in the courts and alleys, it was most important that the surface of the ground should be impermeable to offensive matters deposited on the surface. About 14 years ago, acting on his report, the authorities of Bristol had all the public courts and alleys in the city—about 600—paved or pitched and channelled, with great benefit to the health of the inhabitants. Mr. Davies went on to refer to the importance of proper ventilation, and dealing next with the subject of houses for the working classes, he said care should be taken not to multiply the number of people living on an acre of ground, and he therefore strongly objected to houses of more than one storey. Each house should be distinct and independent. Nothing tended so much to degrade and demoralise the people, produce unsanitary conditions and spread zymotic disease, as houses in common, as witness the flats in Glasgow and old dilapidated mansions in Bristol, now inhabited by several different families. Our large towns required spreading, not concentrating. The inclination of legislators and philanthropists in the present day was to concentrate people in block houses, which, when careful supervision was withdrawn, would become nests of fever. His chief hope of this popular movement being limited lay in his confidence in the social instincts of Englishmen being opposed to it (applause).

LECTURE B

Yesterday afternoon, Mr. D. Davies, delivered the second lecture of the course, his topic being *Sanitary Arrangements of Towns and Villages*. He observed that wherever man settled down in a fixed habitation he accumulated around him a quantity of excrementitious matter, and more especially when he settled down in considerable numbers in cities, towns, or villages. One of the most difficult problems in hygiene was to discover the best means of getting rid of the effete matter of various kinds that man necessarily produced. From Moses down to Rawlinson and Hawkesley and various other modern engineers the problem had been discussed and settled in a variety of ways, but he must candidly tell his hearers that he did not know of one that was satisfactory on all points, and not one that had not some concomitant evils. He thought it was a wise course to take a short review of the various methods recommended and adopted at various times and places. He premised his remarks with a few words on human excreta as affecting human health. He had no reason to consider that when they were the produce of a healthy person and free from the germs of disease that they could, in their natural state, prove injurious to the health of anyone. He could quote instance upon instance where water containing human sewage had been drunk for months and years without any detriment to the health of the drinker. In such cases the condition of the water had been discovered only by the accidental introduction with the sewage of the germs of zymotic disease, and then the drinkers had fallen victims to disease in large numbers. He did not wish to be misunderstood on this point. He simply said the pure sewage *per se* was nasty, but innocuous; that when free from the germs of disease it could not give rise *de novo* to any one of the principal zymotics as was generally supposed. At the same time he must emphatically state that the presence of a trace of human sewage with either water or anything else used for food was contingently most dangerous and to be avoided, because that trace of sewage might be the link of connexion between the alimentary canal of the drinker and the alimentary canals of some persons suffering from typhoid fever or some other zymotic. With regard to human sewage, he further believed that where accumulated and undergoing fermentation, although it could not give rise to any of the principal zymotics, it might give rise to a septic influence which might favour the condition called hospitalism. Having made these preliminary remarks, he proceeded to discuss the removal of sewage, and observed that the different modes might be divided into three classes. 1st. The dry method, including earth closets, pan closets, the Goux system, Stanford's system, and Lierner's system. 2nd. The water carriage system, divided into irrigation, intermittent filtration, and purification by precipitation—*a* by lime; *b* by sulphate of alumina, *c* by the A B C system. 3rd. Running it into the sea or into a tidal river. The dry method was the one ordered for the Hebrews by their great legislator. This was simply perfect, but in modern towns and villages not practicable. The earth closets invented by the Rev. H. Moule were an excellent modification of the Mosaic injunction, and well adapted to many of our modern conditions. He considered these closets admirably adapted for country houses and institutions situated in the country, where they could calculate

on a supply of disciplined officers, upon a sufficient supply of virgin earth, and upon ground to utilise the compound. They were also adapted for country cottages with gardens, and in such cases he did not see why waste should be allowed or expenses incurred in making drains. But for crowded towns, with mixed, undisciplined populations, they were totally inapplicable. The next dry method was the pan closet, tub or pail closet, by which the excreta were removed daily. This method was extensively used in Birmingham and Manchester. It was spoken well of by some who had seen it in operation, but he was not predisposed in favour of it, and he could not well conceive how it could be worked in Bristol. The Goux system was a modification of it, and was in full operation in Halifax. It was expensive and required constant supervision, and the manure sold for little more than the cost of carriage. After glancing at Lierner's system, which had been described by Mr. Rawlinson, C.E., as a "costly toy," the lecturer went on to notice the various water carriage systems, and remarked that one of the most promising of these was that of irrigation. The sewage was conducted by sewers or drain pipes on the land to be irrigated, and then distributed over it, as at Westbury-on-Trym; or where the level did not allow of that it was collected in a cess-pool, thence pumped by a force-pump into a high tank, and thence distributed over the land, as at the Bristol Workhouse. The warm supporters of this system claimed for it that it utilised all the sewage, that it was free from danger, that it created no nuisance, and that it was remunerative. Each and all of these sanguine views had been traversed by other observers. The system had as many restrictions as to render it inapplicable but to few places, but he was of opinion that in some localities it might be applied with benefit and safety. He should most dread its effects on the wells of the surrounding country. The next mode of dealing with sewage, "the intermittent downward filtration," was working well at Merthyr, and was spoken highly of by Dr. Dyke, the very able medical officer of that town. Then there were several methods of water carriage, systems by which the sewage was brought into large tanks, and precipitants of various kinds added to it. The supernatant water was then alleged by the supporters of the various systems to be innocuous, having lost most of its original constituents. After the sewage was precipitated, the clear water was let off, either for irrigation where practicable or into a running stream. The sludge was dried and sold for manure. The report of the Parliamentary Committee was not favourable on any of these systems. It appeared to him that the plan of Major-General Scott was the best of these depositing plans. It commended itself strongly to him as a health officer, as it applied a disinfectant to the whole system of drains, and would destroy any germs of infectious disease in them. If the citizens should decide to convert the river into a floating dock, the question would be between the extension of our main sewers to a point near Clevedon at an enormous expense, and the adoption of Major-General Scott's plan at Clifton-house. It appeared that all the methods yet devised for the removal of sewage did not pay; most of them were carried on at a loss. The mode he was about to mention took this point for granted, that the thing was not worth saving, and disposed of the whole question by sending it by water carriage into the sea or into a tidal river under conditions that would prevent its return. This method was the cleanest, the best for health, and the cheapest where it could be practised. Bristol, from time immemorial, had practised it. He was not aware that any case of disease had ever been caused by our tidal river, although at times it was by no means sweet in odour. If our citizens decided on not dockising the river, then he said by all means leave well alone, and give the sewage to the fishes. In country districts, with large villages with houses without gardens—a condition which ought not to exist—it was often difficult to dispose of the sewage. There were no sewers and no out-fall. In such cases cesspits were allowed, but these, owing to their improper construction and had management, sooner or later became great nuisances. He had frequently known them, and some not very far from Bristol, consist of a simple pit or well, made in porous soil in immediate contiguity to the well of water for domestic use, which of course became contaminated. The amount of sewage actually swallowed by human beings in this manner was simply incredible except to eye-witnesses. To such an extent was the water supply contaminated by the cesspools in the country around Bristol that a glass of water safe to drink was a rare article when drawn from a well. In South Gloucestershire he would suffer for a prolonged period from thirst before drinking a tumbler of well water, except he knew the source whence it came. With regard to the methods of removing sewage, he gave the preference when practicable to large sewers and water carriage discharging into a tidal river. Whenever water carriage was adopted and sewers had been constructed, care must be taken that there was no accumulation of gas with high pressure in them. Mr. Davies next dealt with the ventilation of sewers, and said when the main sewers were large, the gradient good, and the flushing efficient, as at Clifton, allowing of no accumulation in the main sewers, no ventilation was necessary. When, however, sewers were small, laid on a very small gradient, and imperfectly flushed, ventilation became absolutely necessary. Various schemes had been proposed, but he preferred the plan of Mr. Rawlinson, who took the traps out of the street gratings. Though he was a convert to this new mode of ventilation as the best, he would on no account follow it over zealously. He should have no hesitation in throwing open all the street gratings on the low levels in Bristol, but he should certainly hesitate to do so in Clifton, owing to its elevation, which would attract any light gases found in the sewer, but with the gratings opened at the same time it was possible that no evil would result. With regard to town scavenging, the removal of ashes, house refuse, and such like, this seldom came under the notice of the officer of health except by way of correspondence from some timid person. Ashes were in themselves absorbent and disinfectant, and where, as in Bristol, sewage was not allowed to be mixed with them, they were free from all danger. In conclusion, he described the qualifications and duties of inspectors of nuisances, and, in closing his lecture, said if the men escaped death from zymotic diseases, their general strength was frequently undermined, and their health deteriorated. Of late years there had been great mortality amongst the Bristol inspectors. As they were not Government officers, there was no pension for them when disabled in their duties, or for their widows and orphans after their death.

LECTURE C

Yesterday afternoon Mr. D. Davies, M.R.C.S., Medical Officer of Health to the Bristol Sanitary Authority, delivered, at the Medical School, Tyndall's-park, the third lecture of his course on "Hygiene," his subject being *Nuisances*. He observed the common meaning of the word nuisance was clear, viz., anything that is vexatious, annoying, or injurious to a person. The Public Health Act, 1875, used the words "a nuisance or injurious to health." He referred to the recent legal definitions of nuisances, and remarked that as the law stood now there was power enough under the definitions given—except for one or two saving qualifications only exceptionally applicable—to sweep away everything from our midst except roses and lilies, and coupling this with some recent decisions in the Court of Chancery in private actions for injunctions against alleged nuisances from manufactories, he was of opinion that by a consistent and logical application of recent decisions to manufactories creating unpleasant odours, but few of them could escape being stopped; and this busy, thriving England of ours could be reduced to a wilderness, with grass growing over our streets. But there was no fear of such a catastrophe. Proceeding to consider what were the nuisances which came under the action of Sanitary Authorities under the Public Health Act, he said dogs might howl or bark, cocks might crow, and cats with their noises might make night hideous, but Sanitary Authorities could not interfere with them. Stables near a house were certainly a nuisance, but it was considered by some legal authorities that if they were kept clean, well drained, and well ventilated, and the manure removed at frequent intervals—say twice a week—they could not be interfered with or compulsorily removed. As to whether they were in a medical sense injurious to health, he was most strongly of opinion they were not. Pigs were charged with the causation of all sorts of fever and other diseases in man, but honestly and frankly expressing his opinion, founded on observation, he was not aware of any of the diseases of man being caused by the proximity of pigs, or that any of the pigs' own diseases were communicable to man, except those of

a parasitic character. Nevertheless the pig was not a pleasant neighbour, and ought to be excluded from close proximity to houses on the score of general disagreeableness. The same remarks would apply to milch cows and cow-houses as to horses and stables. He should be glad to see by-laws regarding the keeping of horses, pigs, and cattle made and enforced in the city—such by-laws would much simplify sanitary duties, and prove useful guides to the public. Frequent complaints were made to officers of health regarding the keeping of rabbits, pigeons, ducks, guinea pigs, and other pets. In such cases he recommended the writing of a civil answer to the complainant, giving good advice in a kindly manner to the offender, and making matters generally smooth. He next directed attention to offensive trades, and observed one of the offensive trades which had given the authorities the most trouble in the city was bone boiling, or grease boiling. When badly conducted in a crowded street by a manufacturer of limited means it was frequently intolerable and must be abated. There were three ways of abating the nuisance; 1st, by conducting the process under a dome or air-tight roof, and conducting the fumes into a very high chimney and dispersing them into the atmosphere at a great height; 2nd, by conducting the fumes, when the boiling was done by steam pipes, into an underground cistern of water to be there condensed; 3rd, by conducting the fumes into the fireplace and there burning them, but that could only be done when the melting was done by direct fire and not by steam. The manufacture of manure when carried on by men of limited means was frequently a great nuisance, but there was one comfort, such men did not continue it long. The manufacture should be conducted under domes and the fumes conducted into a long shaft. The trade of "sausage strings and cat-gut maker" was a most offensive one, he knew. By "sausage strings" was meant the cases in which the meat was packed. The intestines of sheep or other animals were steeped in water until a high degree of putrefaction had taken place and a stink had been produced which, like Egyptian darkness, might be felt. The sausage cases were then cleaned and sold to the sausage makers, but he would not proceed further with the mysteries of the trade. He was not aware of more than two such manufacturers in Bristol. The only way to abate the nuisance arising from this trade was to exclude it from any inhabited locality. The tanning trade, when of the ordinary kind, and conducted in a proper manner, was not a public nuisance, but formerly a large number of dried Indian hides called kips, were brought to Bristol and their preparation caused a great stench. He was of opinion the trade of preparing these kips ought not to be carried on in the midst of a crowded community, but if allowed by the authorities it ought to be carried on under a dome and a high shaft. The manufactory should be surrounded with high walls, as the effluvia were enough to produce nausea and vomiting in persons not accustomed to them. He would call attention to the remarkable fact that the men engaged in scraping these hides—although breathing the foulest air that extreme putrefaction could produce—were remarkably healthy and free from all zymotic diseases. The salted hides imported from South America and other parts were very disagreeable in odour, but he knew of no specific disease produced by them. In conclusion, he said Sanitary Authorities in dealing with these nuisances required much judgment and discretion. On the one hand they had to do their duty to the public, and to conduce as much as the means at their command would allow them towards public health and comfort; and on the other hand not to unnecessarily oppress the manufacturer or needlessly thwart the mainspring of our prosperity.

LECTURE D

Yesterday afternoon, the fourth lecture of the course on Hygiene was delivered by Mr. D. Davies, Medical Officer of Health to the Urban Sanitary Authority, at the Medical School, Tyndall's-park.

Mr. DAVIES chose for his topic *Disinfectants*, and observed that on no subject had the human mind shown a more exuberant fancy or displayed more inventive genius than on this. A vast number of articles had been ranked as disinfectants and preventives of disease, ranging from harmless charms carried by the superstitious to fire and the stronger chemicals. The theory of disinfectants was founded on a belief in the seeds of diseases or infections consisting of organic matter capable of reproduction, and the power of fire and chemicals to destroy the composition, and therefore the reproductive power of the disinfection. The best of all disinfectants was fire, and the surest mode of disinfection was the destruction of the infected article by burning it. But as that process was, owing to the expense it incurred, not often practicable, a modification of it was most generally used. It had been found that the exposure of an infected article to a heat of from 220 deg. to 250 deg. F. destroyed infection. This was done by the Sanitary Authority in Bristol by means of a large iron box or chest heated by gas-jets underneath. The articles were put into the box when heated to 250 deg. and kept there for one or two hours. In the case of clothes and bedding care must be taken to see that every part of the interior was exposed to that heat. Articles of clothing could not be exposed to a heat above 250 deg. without a risk of destroying them, and that heat was positively efficient as a disinfectant. It was probable that a heat considerably below this would answer the purpose, but there was no reason why we should restrict ourselves to it. He alluded to experiments made by the late Dr. W. Budd, which proved that a heat below 212 deg. sufficed to destroy the vitality of the virus of vaccine matter, and observed that we also knew that a heat of 212 deg. destroyed the germs of typhoid fever in water or milk. He had thought it probable that a heat far below this—a heat even endurable by human beings, was capable of destroying the germs of scarlet fever. In the southern provinces of India he had been told this disease was unknown as an epidemic. He suspected from the preference of typhus for cold weather that in that respect it resembled scarlet fever. As examples of a different nature he instanced small-pox, yellow fever, and Asiatic cholera, which were most active and virulent in warm weather. He mentioned as the best made and most easily regulated apparatus for disinfection of clothes that he had yet seen the one made for the Clifton Steam Laundry Company. After observing that disinfection by heat was not applicable to all articles of clothing, he drew attention to the gaseous disinfectants, and observed the most efficient of this class was oxygen in the form of ozone. To procure this in its pure form and to apply it in a direct manner was not practicable for general purposes. There were many indirect ways of applying it, as by Condry's fluid—peroxide of hydrogen—exposure to the fumes of iodine, terebene, sanitas, and a host of other disinfectants. But for practicable purposes the most easily procurable and the most reliable gaseous disinfectant was sulphurous acid gas. His hearers must not fancy that burning a few matches or an ounce or two of sulphur in a large room had any effect beyond creating disagreeable fumes. To disinfect a room thoroughly with the gas a pound of sulphur or more ought to be burnt for every 1000 cubic feet. In a room charged with the gas any number of infected articles might be spread, but in all these cases assurances should be made doubly sure by having all washable articles afterwards washed with a disinfectant or exposed to a heat of 250 deg. Other gases were largely used for disinfection, especially chloric. For his own part he had no great confidence in that gas, having seen many cases which suggested its failure as a disinfectant. Carbolic acid was, in his opinion, "facile princeps of all antiseptics." Its great power in rendering inert the germs of bacteria and other organisms in the atmosphere, and thus preventing septicæmia and pyoemia in surgical wards was, as he took it, beyond all reasonable doubt. He at one time thought it had a similar power over the seeds of the principal zymotics, but his confidence in that respect was rudely shaken. An experiment he made showed that camphor vapour was a stronger disinfectant than carbolic acid vapour. It was also found by the officers engaged in stamping out the rinderpest that carbolic acid, unless used in very large proportions, was not reliable as a disinfectant for that virulent zymotic. Having admitted all this, he nevertheless considered carbolic acid as an antiseptic a most valuable agent, having power over the morbid matter, whatever it be, that gave rise to infections, erysipelas, hospitalism, pyoemia, septicæmia, and fermentations of all kinds, but feeble, except in large proportions, against the seeds of the principal zymotics. To prevent the condition called hospitalism, they kept the air of the Sanitary Authority hospitals always permeated with carbolic acid vapour. They used it in the form of a powder, called Calvert's powder, very extensively in Bristol for the purification of privies, communicating drains and other places. For

preventing septic fermentation and the consequent discharging of gas in sewage matter, he did not know of anything equal to it. Bisulphite of lime in solution was extensively used by brewers for the purification of foul beer barrels. It rendered them sweet and pure, and it most thoroughly destroyed the germs of every kind of fermentation or mould that might have attacked them. On exposure to the air, it threw out sulphurous acid gas most profusely. It bleached linen immersed in it, but if free from sulphuric acid did not destroy the texture. At the Sanitary Authority Hospitals all infected articles were soaked in a mixture of one pint to five gallons of water, and after remaining in it a few hours were washed with carbolic acid soap, dried, and then passed through the dry heat apparatus. They had never heard of any disease having been produced from such clothing. Permanganate of potash was extensively used as a disinfectant. The late Dr. Letheby considered its powers as a disinfectant extremely feeble and untrustworthy. That might be true of it when used to disinfect clothes saturated with infectious discharges. Nevertheless, he (Mr. Davies) had reason to believe that when spread about a sick room in open dishes and sheets soaked in it were hung across the doorways of sick rooms, it had the effect of tangibly purifying the surrounding atmosphere, and it was undoubtedly useful and convenient to add in small proportions to water in the washhand basin for the medical attendant to wash his hands in after handling an infectious patient. It was generally used in a solution under the name of Condy's fluid. Its disinfecting qualities depended on its oxidising properties. It was a disinfectant which we could not part with, owing to its being non-poisonous and safe to handle. For his own part, he could go through life satisfied with the above list of disinfectants, but there were many besides which he knew were excellent. It seemed that the essential oils of many plants had strong disinfecting power, as he had mentioned with regard to camphor. One of the best of these "terebene," was a preparation from the pine, invented by Dr. Bond, of Gloucester. It was very pleasant and not poisonous, and might be used in the same manner as Condy's fluid. Dr. Bond had also invented an excellent soap with terebene in it. He (the lecturer) most strongly recommended this soap as by far the most successful in removing any disagreeable smell from the hands. Then they had the oil of thymol with preparations of it. Sanitas was also good, being an oxidising agent containing the peroxide of hydrogen. Chloralum, or chloride of aluminium, was likewise an excellent disinfectant, and non-poisonous. It was a good deodorant, and most useful for sinks, drains, and cesspools, as well as in the sick-room. He could multiply the list, but for no purpose. The fact was that any chemical of strong affinities, if put in the right place at the right time and in a proper manner, was a disinfectant. In Bristol they used the common sulphate of iron for disinfecting drains and sewers on a large scale. He did not think that a disagreeable smell to a disinfectant was under some circumstances an objection, but rather a recommendation. Such a disinfectant was a rough and ready means of testing the communication of a well of drinking water with the drains. They also found strong-smelling disinfectants useful in the poorest districts of the city when infectious cases had not been removed. The disagreeable odour was a warning of danger, and often succeeded in warding off idle gossips. He would caution his hearers not to apply disinfectants as mere charms. They were chemicals, and they must be applied within the rules of their chemical affinities to produce the desired effect. Let him likewise warn them against considering disinfectants as a substitute for fresh air—the oxygen of the atmosphere was, after all the chief disinfectant, especially when we could apply it in the form of ozone. Ventilation was the best means of clearing a room of a foul smell, but there were times when this could not be applied except slowly. In such cases he had found a few drops of Lin Iodi on a piece of blotting paper exposed for evaporation in the room the most efficient. In conclusion; he remarked however useful disinfectants might be they were not on any account to be depended upon without isolation of the infected patient, and under no circumstances should their use be pleaded as a bar to isolation.

LECTURE E

Mr. D. Davies, the Medical Officer of Health to the Bristol Sanitary Authority, lectured on Friday afternoon at the Medical School, Tyndall's Park on *Zymotic Diseases*. He observed that the application of preventive measures against disease of this class formed the principal and most important, and he need not add, the most anxious duties of Health Officers. The returns of mortality showed that nearly one-fourth of the total mortality of our race was due to these diseases. Success on combating them would depend much on their having more or less clear views on their nature and origin. Since Sanitary Science had come so much to the fore, various, and as he believed, erroneous views had been spread abroad by well meaning sanitarians, which had frequently diverted the attentions of Sanitary Authorities from the real air of the enemy. Sanitary Authorities and their officers had too frequently been paying attention to the enemy's camp followers, whilst the enemy in force had been ravaging the citadel. It would be utterly beyond the scope of his course of lectures to give a detailed theory of the nature of zymotic disease, but he considered it his duty to dwell cursorily on some popular errors on the subject: errors which, although they occasionally ran parallel with the truth in active measures, not unfrequently paralysed those measures, and diverted attention to irrelevant matters. The first error he should point out was the attributing the origin of the principal and well established zymotics to dirt, *per se*. Dirt of every kind was a great nuisance, but they might paint even the devil in too sombre colours. As an illustration of this form of error he gave the following quotation from the writings of a lady who was almost an angel in human form:—"Is it not living in a continual mistake to look upon diseases as we do now, as separate entities, which must exist like cats and dogs, instead of looking upon them as conditions, like a dirty and clean condition, and just as much under our own control, or rather as the reactions of a kindly nature against the conditions in which we have placed ourselves. . . . I was brought up both by scientific men and ignorant women, distinctly to believe that small-pox for instance, was a thing of which there was once a first specimen in the world, which went on propagating itself in a perpetual chain of descent, just as much as there was a first dog or a first pair of dogs, and that small-pox would not begin itself any more than a new dog would begin without there having been a parent dog." She then gathered strength, and with a brave heart, such as a lady only possessed, made the following astounding statement:—"Since then I have seen with my eyes and smelt with my nose, small-pox growing up in first specimens, either in close rooms or in overcrowded wards, where it could not by any possibility have been caught but must have begun. Nay, more, I have seen diseases begin, grow up, and pass into one another. Now dogs do not pass into cats. I have seen, for instance, with a little over-crowding, continued fever grow up, and with a little more Typhoid fever, and with a little more, typhus, and all in the same ward or hut." That was very plain speaking. No other person had, in such a concise, graphic and unmistakable manner, converged into a form the views of the modern Pythagorean school of Sanitarians. Possibly no single lady in all England had done more for humanity than the writer of the above, but he doubted and doubted very seriously whether her advocacy of such opinions as these had not done more to retard Hygiene than their undoubted goodness and philanthropy had done good. The propagation of error by such a high and trusted authority was a very serious and deplorable matter. This error, when an epidemic threatened a district, too frequently diverted attention from the true contagion which was insidiously spreading itself, and sanitary efforts exhausted themselves in persecuting pigs, rabbits, donkeys and such like. He had known a few pigs kept in a farmyard declared to be the cause of a widespread epidemic scarlet fever, he had known an epidemic of enteric fever attributed to some blood accidentally thrown on an ash-heap. No; the principal metabolic zymotics had a far more historic, ancient and, he must confess, mysterious pedigree than dirt, cabbage stalks, and moonshine. They all multiplied their kind after a specific mode of reproduction. After quoting Dr. William Budd on this point, the lecturer observed that his hearers might ask him "How and when these diseases sprang into existence?" Their origin he did not know, and no one else knew definitely more than we do of the origin of the cat and dog. John Simon, in his grand essay on contagion, pointed out the line which enquiry should take. Evolution in fitting

localities—and probably most in the East or Central Asia—had in all likelihood much to do with them. The primary condition from which they first sprang might have been transient, or in the same defined localities might still exist in a different and little suspected form. Be that as it may, it sufficed for them to know that they did not arise *de novo* in our days and in our own country. He could not part with this subject without pointing out the greater wisdom of mankind in dealing with matters affecting the pocket than in dealing with matters affecting the human health. When the rinderpest—a zymotic disease affecting neat cattle—was introduced into this country 14 years ago the usual inundation of false hypotheses regarding its nature and origin appeared. A thousand and one hypotheses—some of which would have disgraced the inmates of a lunatic asylum—were aired in the public press, but the Legislature, wise and decisive in matters affecting the public purse, appointed a Parliamentary Commission, before which the wild hypotheses vanished into the limbo of forgetfulness. Isolation, the pole axe, disinfectants, and deep burial did the rest, and the herds of England were saved. Nevertheless the same baseless, evil-producing hypotheses, like badly laid ghosts, continually reappeared regarding human diseases. Another error which was held by eminent sanitarians was the belief that the very fact of a patient suffering from a zymotic disease was a positive proof that the patient was loaded with some evil produced and accumulated in him by the sanitary conditions to which he had been exposed, and that the disease was only feeding on this evil. A very eminent sanitarian, who was also a great ornament to the medical profession—Dr. Carpenter of Croydon—held this hypothesis. In a lecture delivered by him to the Sanitary Institute he had reduced this hypothesis to a simple formula. To the production of a zymotic disease, say scarlet fever, according to this view, there must be three factors—call them A, B and C. "A" represented the patient's constitution, "B" the evil accumulated in it by bad sanitary conditions, and "C" the germ of the disease. Without these three conditions, zymotic disease could not exist, and the character of the attack would depend on the character and quantity of "B." Now this view was very pretty and very simple, but observation and long experience had led him to totally disbelieve in the existence of "B," Dr. Carpenter's second factor. For example, vaccine, a contagious zymotic, would affect a healthy child as readily as the most puny, tuberculated and badly fed infant. Scarlet fever, if contracted, would affect a most healthy well-nourished child, and most judiciously nursed in one of our palaces in Clifton, as violently and as fatally as a poor half-nourished child suffering from tæbes in a wretched hovel in St. Philips. It had within his recollection entered a faultless house in Clifton, and snatched away two children, the hopes of the family, in twenty-four hours. It has been known to carry away in two weeks from a healthy country parsonage the rector's wife and five children. It had, and not so long ago, deprived a celebrated living statesman of two of his children whilst sojourning at a beautiful and most salubrious watering place. "B" as a factor could not exist. Analogy was also against it. As regarded zymotic diseases, his own impression was that the attacks were fewer in the most sanitary districts owing to the greater isolation of the residents, and their avoidance of exposure to infection, but that the attacks in individual cases were on an average as severe. When he disputed the existence of "B" as described by Dr. Carpenter, he did not for one moment deny a factor, or several factors of an unknown value, which must materially influence the prevalence, the character, and the results of zymotic attacks. Of these he considered some unknown atmospheric conditions, and family idiosyncrasy to be the principal ones, but of the exact nature and of the mode of action of these two conditions he must acknowledge total ignorance. He then proceeded to bring before his auditors in a practical manner the best mode of dealing with the principal zymotics in their respective individual forms, and treating of small-pox said it seemed to have a very ancient history and to have been known in China long before the Christian era. Be this as it may, it was only known to us as a purely infectious zymotic. The bare fact of a case of small-pox appearing in a populous district was an indication of considerable public danger, as in every community as yet there were some persons not protected by vaccination, and more only partially protected, not having been re-vaccinated. Re-vaccination alone was the only absolute guarantee of immunity. The first duty of an Officer of Health was to ascertain that it was a genuine case of the disease, and so not to raise an unnecessary alarm, and not to risk the life of the patient by needlessly removing him to a hospital where he might contract the disease if not already suffering from it. The Health Officer, in the first place, would consult the medical attendant of the patient, and, with his consent, if possible, visit and examine him, but his hearers must not fancy that the task was always an easy one. To diagnose some cases of small-pox during an early stage in an unusual form had led good men into error. He had repeatedly known measles, varicella, and more than once maculated typhus mistaken for small-pox, and removed. On more than one occasion he had known hæmorrhagic small-pox mistaken for maculated typhus. These mistakes although not always avoidable, were serious blunders, and he had known serious results from them, although he had endeavoured to isolate the patients sent in by mistake, and discharge them as soon as possible. He drew attention to the fact that the principal zymotics (except typhoid fever) were excluded from nearly all the great Medical Hospitals and Infirmarys connected with Schools of Medicine. Very many medical men had had no practical acquaintance with these complaints until called upon to treat them. As these diseases were very prudently excluded from the Royal Infirmary and General Hospital, he had often wished that some arrangement for acquiring a practical knowledge of them could be made with the medical officers of the Bristol Dispensary or the Poor-law medical officers, under whose care they chiefly occurred. Mr. Davies proceeded to point out the characteristics which distinguished small-pox from chicken pox, varicella globata, measles and secondary syphilitic eruptions, and he earnestly cautioned his auditors not to mistake the hæmorrhagic form of small-pox for maculated typhus—a mistake not unrequent. He next indicated the steps Health Officers should take to prevent the extension of small-pox when a genuine case was reported to them. If the patient was a pauper, his removal should be immediately required into the Union Hospital for infectious diseases, and every machinery of command should be set in motion for that purpose. If the person was not destitute but was without proper means of isolation in his own house, he should be removed to the Sanitary Authority Hospital for that purpose. The case having been removed, the Health Officer should set to work to blot out every germ of the disease that had been left behind it. Every article of clothing, and other things which the patient had handled, should be collected and put in the room which he had occupied; a quantity of sulphur, more or less according to the size of the apartment, ignited; and the room kept closed for twelve hours. If there were any articles in the apartment not worth further attention they should be burnt, and the infected clothing, including the bedding, taken in a proper conveyance to a hot air apparatus, and exposed to a heat of from 220 degrees Fah. to 250 degrees Fah. The things might then be safely washed, or otherwise dealt with by anyone. The room in which the patient had been should be cleansed in the ordinary way by white liming and re-papering. The duty of the Health Officer would not yet be complete. He should ascertain, by examination, if possible, if there were any unvaccinated persons in the infected houses or among the social connexions of the patient. Having discovered any such unfortunate persons, the machinery of the Vaccination Act should be put in force at once. By a judicious course of action the officer would hardly ever fail in giving all the safety of vaccination and in stamping out the disease. Should the disease threaten to assume the dimensions of an epidemic, large employers of labour should be pressed to have all hands in their employ re-vaccinated. The next question that arose was—"When may a person recovered from small-pox be allowed to mix with other persons?" The answer to that question would depend much on the nature of the attack, but in general terms such a person ought not to be allowed to enter society until every particle of destroyed epidermis or scurf had been removed. For the hastening of this process camphorated oil should be applied freely to the skin of convalescents with a daily tepid bath as soon as they were able to bear it. When an epidemic threatened a locality, one of the most sure means of stopping it was to ask the Sanitary Authority to allow the employment of a number of extra officers to make house to house visitation to discover unvaccinated children as well as adults. Having discovered such, the Vaccination Authority should be induced to enforce the provisions of the Vaccination Act, which gave compulsory powers

over the parents or guardians of all children under 15 years old; the large employers of labour should be induced to have their employees examined, and to offer them vaccination or re-vaccination gratis; and similar influence might be brought to bear on public schools through the School Boards or schoolmasters. In this way they would soon break the neck of a small-pox epidemic. In conclusion, Mr. Davies offered suggestions as to the best means of dealing with persons, who, from carelessness or apathy, or from superstition or religious conviction had not been vaccinated.

LECTURE F

On Monday afternoon, Mr. D. Davies gave another of his course of lectures at the Bristol Medical School, Tyndall's park. His subject was *The Principal Zymotics*, and his remarks had especial reference to *typhus* and *enteric (typhoid) fevers*. He observed that for two centuries these two diseases were considered as one and the same, and he thought the credit of first striking out the right path was due to their continental brethren. Since 1836 different English physicians had established the distinction between the two diseases, and the point was definitely settled and accepted about 1850. He took the two together for the sake of contrast. From a sanitary point of view they signified very different issues, and required very different measures for their suppression. In typhus in the great majority of the cases one was able to trace the source of infection; in very many cases of typhoid fever they failed to do so. Typhus had no connexion with bad drains, sewer gas, or contaminated water. Typhoid almost always had connexion with one or other of these—especially with water containing sewage with fever germs in it. The more he saw of this disease the more the belief grew on him that almost every class of enteric fever was due to the seeds of the disease taken into the stomach. Typhus was extremely infectious; the infection was conveyed by the atmosphere, and it had a long striking distance. On the other hand, the gaseous emanations from a typhoid patient, if diluted with air, were apparently innocuous. Its striking distance was so short that it had not been ascertained. Patients suffering from it might safely be admitted into the wards of a well-ventilated hospital, whilst the admission of one patient suffering from typhus would be a source of the greatest possible danger to the other patients. Enteric fever infection might be conveyed by clothes soiled with discharges from the patient to a washerwoman who handled and stood over them when washed. But this amounted to almost direct contagion or swallowing of the germs. He was not aware of the intermediate communication of this disease by clothes merely exposed in the sick room or by the person of an attendant. On the other hand, he had known typhus again and again spread by an article of clothing. He gave instances of this, and said these facts, with their present knowledge of the distinction between typhus and enteric fever threw a new light on the past, rendered the epidemics of the middle ages and subsequent times more clear to them, and pointed out a more definite line of action in the future. Proceeding to give his hearers some practical directions, the lecturer said if they had a case of typhoid to deal with they should have all the drains and surroundings of the house carefully examined, and have the drinking water analysed, and if they were found wrong have the evils remedied. They should see that the gas traps of the house were good, and above all things see that all the *ejecta* from the patient were disinfected, as Dr. Budd recommended, on their very issue from the body. Let all the clothing be disinfected before it was washed, or the washerwoman would be infected. If the patient's friends were clean and decent people, he did not consider it necessary to remove the patient to the hospital more than for any other disease of a general character. In a clean house, with good water, good drains, and good ventilation, if the disease spread it was due to some error of the doctor or neglect of the attendants. He had good reason for believing that convalescents, for a period of two or three months after convalescence, discharged infectious germs from the intestinal canal, and thus infected drains and wells. He believed enteric disease was always the result of a specific germ, but such germs like those of tubercular phthisis (which he also considered to be a contagious zymotic with peculiar laws) had become so widely spread amongst us that it was often impossible to trace them to their immediate source. It was a complaint which, like phthisis, preferentially affected certain families. Turning to typhus, he observed that supposing they had a case in their district, they should by all means get the patient removed into a sanitary hospital. Isolation in the house was, as in the case of small-pox, insufficient. A case of typhus on the ground floor of a large house, inhabited by several families, very soon would affect every floor in the house, and almost every individual. Whilst a typhus patient was in a private house inhabited by the working classes his friends and the gossips of the locality were sure to visit him and spread the disease. Let him assure his hearers that the mass of the people did not believe in infection, but the prevailing creed was a blind fatalism, frequently expressed to him by the expression, "Oh; it is all the Lord's will." This might be theologically correct, but in hygiene it worked very badly. Having got the patient removed they should set to work to blot out every trace of the disease. If they left a single point unattended to they would have more cases. In no disease was a medical officer of health of so much service to the public as in preventing epidemics of this complaint. If this fever was allowed by neglect to spread, as was the case in Bristol in 1864, or if the medical officer exercised himself in studying the vagaries of the popular Pythogenia theory, it soon reached tremendous dimensions. On February 3rd, 1865, the first day of his appointment, he (Mr. Davies) visited 150 typhus patients in St. Philip's, and there were many others scattered about the city. Of that epidemic about 150 died. Since then we had had the disease frequently introduced into the city from Ireland, Glasgow, New York, and other places, but we had always been able to stamp it out by prompt and decisive measures.

The cases of the disease that would give them the most trouble were light attacks, where the patient suffered only from a slight *malaise*, and would not be removed into hospital or go to bed. These light cases were quite as infectious as the others, and much more troublesome. The disease, unlike typhoid which affected chiefly children and adolescents—affected all ages, but preferentially attacked the bread winner, prevailed the most among the poor, but was most fatal among the rich. He considered its infection as virulent as that of scarlet fever, but more manageable to a health officer, because it did not choose its victims almost exclusively among young children, who presented great obstacles to removal to a public hospital. If they removed cases of typhus into a hospital they must take great care not to put them in the same ward as patients suffering from typhoid fever or any other disease, as the latter on recovering almost invariably developed typhus if exposed to its infection—the one fever was no protection against the other. The period of incubation of typhus fever was somewhat uncertain, but he put the shortest period at eight days; he had no doubt the period might be prolonged, like that of enteric fever, but he should consider a person safe in 15 or 16 days after exposure to infection. His advice to persons exposed to infection was "Live as you have done during the last six months, and don't disturb the system by any sudden change." Patients who recovered from typhus did so, as a rule, very rapidly, and, with the usual proper precautions, might frequently be re-admitted to their friends in about five weeks from the commencement of the attack. The only disease which typhus could justly be mistaken for was enteric fever, and he pointed out the prominent differences between the two. The lecturer then dealt with scarlet fever, and said that its striking distance was very short—not more than three or four feet. It could, therefore, with extreme care, be isolated in a separate room in a house without danger to persons in the other rooms. The infection at short distance was very virulent, and would retain its virulence in an infected room for many months. Its causation had no connexion with ordinary sanitary conditions. Its period of incubation did not exceed six days, but it might be as short as 24 hours. Sixty-three per cent. of the patients were under five years of age, and 95 per cent. under 15 years. The disease had a preferential predilection for certain families. Scarlet fever had its feeble mimic in a disease called in German *rotheln*, or red measles, and known in England by various indefinite names, such as *roseola*, *rosalia*, *roce*, and *rash*, etc. This satellite of the great zymotics was a true member of the group, but it was an arrant humbug, a delusion, and a snare. It was infectious, prevailed epidemically, but never destroyed life. Its effects were so harmless that he recommended no sanitary measures for its suppression, but it should be understood that it did not protect its victims from scarlet fever, nor did scarlet fever protect from it.

LECTURE G

Mr. D. Davies in his lecture on Friday afternoon at the Bristol Medical School, Tyndall's-park, dealt with *Asiatic Cholera*, and observed that those who had not witnessed an epidemic of this disease in a large town, could not form the slightest idea of its ravages, the rapidity of its action, and the general panic it inspired—the living were then truly walking amongst the dead. The disease had now been acknowledged to have a specific existence, fixed and determinate laws of propagation, and conditions on the observance or non-observance of which its prevalence or obliteration might be determined. He had the tenacity to claim for their action in Bristol in 1866 and their remarkable success, some part at least of what led to the deprivation of this giant of his strength. He knew for a fact that their experience in this City was forcibly represented by the greatest Sanitarian in England, at the important International Congress held at Welmarr, in the year 1877, and he also knew that Asiatic cholera had lost its strength in Europe since that date. To give his hearers an idea of the realities of an epidemic of cholera in former times, he would place before them a short sketch of the epidemic of 1849 of which he was an eye witness. In 1848 it was known that the disease had begun its westward march, and preparations were made for its reception. Early in 1849 Imperial orders of the "Wasb and be clean and fear nothing" kind were freely distributed; lime brushes, lime and chloride of lime were at a premium; donkeys, pigs and cows, and most of the domestic animals located in houses had a bad time of it; and medical men met in serious conclaves to devise means to meet the coming enemy. The medical practitioners of Bristol and Clifton met in the old Medical Library in Orchard Street. Being then a young man, having then just unfurled his "flag of distress" in the city, he was invited to attend. Forms of a most elaborate character for reporting cases of cholera were adopted and printed—each member having subscribed five shillings towards the expenses. He well remembered that one column was for analysis of the urine in different stages of the disease, but on the appearance of the disease it was discovered that a cholera patient never passed any urine. The other columns proved equally useless, and not one of those forms was ever filled up. In the summer of 1849 the disease reached England and arrived in Bristol about June in that year. He need not say that here it found a fitting home. Water in direct communication with sewage was used in most of the houses on the lower level. In a week it destroyed about 80 lives in one court in Back Street. It soon spread into other parts. In anticipation of its coming, a cholera medical staff, of which he was not one, had been formed. After the first brush or two, face to face with the enemy, the medical staff had become like Gideon's host when he went against the Midianites—that is, it was considerably reduced. A few brave men remained. One of these—the good and humane Joseph Williams—came to him as a deputation from the authorities to ask him to join them. He did so, and worked in one of the districts night and day for about a fortnight. Then the cholera broke out among the paupers in the Bristol Workhouse at Fishponds—the disease having been introduced there by a pauper woman from Temple parish. A meeting of the cholera staff was suddenly summoned at St. Peter's Hospital. The authorities laid the case before them, and asked for volunteers to go as a forlorn hope to fight the enemy in the workhouse. He volunteered. Then Joseph Williams arrived and joined him. Next Edward Stock—new secretary to the Bristol University College—arrived, and readily volunteered. That afternoon they went in a cab to the workhouse. On their arrival at the gates they saw a heap of black boxes—21 in number. In his innocence he asked, "What are these?" When he was told they were the coffins of the people who had died that day, he turned round to his companions and said "That is cheery; there must be some warm work inside, and at this rate it cannot last long." They entered. One of their first visits was to the girls' sick ward. There they found about 20 girls, some dying, most of them vomiting, and the floor swimming with discharges. He would not follow the ghastly details further. On the third day his colleague, Joseph Williams died after twelve hours illness. In about a fortnight the disease was subdued, after destroying about 140 lives in the house—he quoted the figures from memory. Such was the cholera in those days when the Pythogenic hypothesis, pure and simple, ruled in high places, and they were told that simple cleanliness, temperate habits and warm clothing were sufficient guarantees against the disease. If he sometimes spoke with rancour of the Pythogenic theory, it was because he witnessed its miserable failure, at every point, to make any impression on cholera. In spite of soap and water, lime washing and physic of all kinds, in abundance, 2090 died in Bristol of cholera in 1849; while in 1866, although attacked at 30 different points, the deaths were only 29. Observation of the disease in 1849 had taught him how to meet it. Proceeding to give practical suggestions to Health Officers, he said if Asiatic cholera should appear in a district, they should immediately forbid the use of all water drawn from wells in the vicinity of any human habitations. If there was not a supply of water, such as we now have from the Bristol Water Company, they should employ a number of carts to carry sufficient water from a distance from some deep spring or other source above the reach of human contamination. They should not trust to analysis for the purity of the water. Water might contain cholera germs when analysis might have pronounced it pure. Analysis might enable them to condemn water as being contingently dangerous to health but it would not give positive assurance that the water was free from danger. Having procured good water from a distance from the outbreak, their next duty was to destroy the seeds of disease by the free use of chemicals. All the discharges should be mixed with some strong chemical, and, if possible, buried in a deep pit dug in the soil. Closets should be disinfected and flushed frequently. He ought to have told his hearers that in 1866, when he found an outbreak of cholera in a court or alley, where the people drank well water, drawn from the surrounding ground, he took the law in his own hands and carried the pump handle off, and told the people "If you drink you die." When cholera was abroad, the people were like bees on a rainy day—they might handle them as they liked for their own good; but when the disease disappeared, they must act again like ordinary mortals. That was the period when a plentiful crop of newspaper correspondence would appear, and when any liberties taken with pump handles would be resented. Angry letters were a sure sign that the epidemic was disappearing. Clothes soiled with cholera discharges were most dangerous and ought to be burnt. Cholera spread itself most readily by means of dry germs from discharges. He had said enough to indicate the preventive means which, if enforced, would stamp out any epidemic of Asiatic cholera and render this terror of the nations a puny thing subject to man's control. The lecturer next referred to diphtheria, and remarked that it was the most capricious and mysterious of diseases. Owing to the peculiarity of its outbreaks he did not consider that it belonged to the same group as the principal zymotics, which had a historic ancestry lost in the vista of the past. He mentioned a few points regarding it which he considered well established, and which on the whole led him to view it as having a parasitic origin, probably of a vegetable nature, and he pointed out the importance of diagnosing the disease from others and of not misapplying the term diphtheria to other affections of the throat. The genuine disease, judging from his own experience, was very rare in this district. He had during a period of 30 years seen only three cases of true diphtheria—two of them died, one recovered. The nature of the disease was being investigated by the best minds of Europe; let them hope for more light on it shortly.

Mr. Davies next drew attention to statistics, and observed when properly used they were invaluable, but their utility depended on the way in which they were used. In no department had they been more abused than in their application to the returns of health and mortality. He considered the following points essential in the choice of factors for statistics of mortality:—1st that the figures were taken from a sufficient number of people—say not less than 20,000, 2nd that these people should include among them persons of all social conditions and of every possible variety of occupation; 3rd that the returns and calculations made upon them should extend over a period sufficiently long to show a fair average—say ten years; 4th that the returns should be carefully analysed and all exceptional influences deducted before they were used for general conclusions regarding the sanitary condition of any town, district or house. The errors committed under this latter head were of daily occurrence. The usual way of calculating the rate per 1,000 per annum was to divide the total population by the number of weeks and diurnal parts of a week in the year. The quotient they called the weekly population. Then it was an ordinary proportion sum—weekly population : number of deaths : 1,000, or the number of deaths multiplied by 1,000 and divided by the weekly population, would give the rate per 1,000 per annum. In the same manner calculations for quarters, months or any sub-divisions of the year might be made. At the beginning of each year he had the weekly

population of the city, and of every sub-registration district separately calculated, and then the weekly calculations were practically very simple. They added three ciphers to the number of deaths and divided by the weekly population. The weekly calculations were interesting, as showing them which way they were moving, but not of much permanent value, as sometimes in a small district, they might, by the unlearned, be read of most alarming significance. Their figures in Bristol were worked on the same method as was used in the Registrar-General's office, which he believed was devised by Dr. Farr, the best statistician in Europe. The results of the calculations were the best that could be obtained from the returns, but the latter were not what they ought to be, and what some day they would be. Numbers of the medical profession differed much in their nosology, even in well understood diseases; and in diseases well understood there was every possible variety of view as to pathology. A considerable number of persons died without a medical attendant; and in these cases they had only the opinion of some ignorant old woman, or the verdict of a non-professional coroner's jury. To classify such returns so as to give a scientific exact return was not possible. In the meantime, they must do the best they could, and prepare the way for a better and more satisfactory state of things.

LECTURE H

Human Food was the subject of Mr. D. Davies's lecture delivered on Friday afternoon at the Bristol Medical School, Tyndall's-park. The lecturer observed that the question of what was unfit for human food might be approached and viewed from two different aspects—the aesthetic or sentimental, and the medical and practical. Judging from the decisions given in the metropolis, and other places, it appeared to him that the different cases of conviction had been chiefly decided on sentimental grounds, and he much questioned whether by all the convictions that had taken place—except in the case of decomposed fish—a single human life had been saved or a case of sickness averted. As a medical officer of health he discarded the aesthetic and sentimental altogether. He had never acted on them. He was no judge of meat from a butcher's point of view, and if he were to follow the dictates of his own mere sentiment he should have to condemn *in toto* a large number of articles which furnished nutritious food for those who liked to eat them. These would include such articles as tripe, eels, crabs, lobsters, sausages, polonies, and other things. He viewed the question exclusively in its medical aspect, and the only point he felt called upon to decide was whether an article was likely to prove injurious to the health of a person using it as food. He did not consider he had a right to answer this in the affirmative unless he could point out what diseases it would engender, and give plain reasons for his opinion; such reasons should be devoid of all sentiment. The problem was much complicated by the fact that animal food in this country, except by a few, was eaten moderately well-cooked, *i.e.*, exposed to a heat that coagulated albumen. This exposure to heat destroyed all germs of organic diseases which might be in the meat, and rendered it harmless, and thus relegated the question to sentiment. However, he was not thus going to heg the whole question *in limine*, as he had no reason to assume that meat was always well cooked before it was eaten, and he should for practical purposes take the different points suggested by the inquiry in detail. He could lay down no rule on the question of decomposition, as he had no evidence to show that eating high or decomposed meat was injurious to health. Even in fruits and vegetables decomposition did not necessarily render them unfit for food. He would, however, make fish an exception. Fish, if past a certain stage of keeping, frequently became injurious to health—although well cooked, some compounds were found in them which heat could not destroy. He would lay it down as a safe rule that fish when it had the slightest odour of putrefaction was unfit for the food of man, and ought to be condemned. The fact of animals having died without being hled to death was not a sufficient reason *per se* for condemning the flesh as injurious to health, but the circumstance of an animal presenting signs of having died without being hled should lead one to make a careful examination of the carcase, and to find out whether the death occurred from disease. The foot and mouth disease was a very infectious disease among sheep, cattle, and swine, but he could not find any reliable evidence that it was communicable to man. Butchers did not consider that if animals were slaughtered during an early stage of the disease that it appreciably deteriorated the quality of the carcase, and all authorities agreed that the flesh was not unfit for the food of man, and that it was not injurious to health. The head, feet, and udders of the animals should, however, be destroyed. Whether the liver fluke, if introduced into the stomach of man, could retain its vitality was, to him, more than doubtful. This would somewhat depend on the habits of the individual. In modern civilised life we swallowed such a variety and such a quantity of condiments that the eggs of the fluke would not have much chance of surviving until they could reach the liver. However, flukes had been recorded in the human liver, but the instances must be very rare. The disease acted on the animal at first as a local irritant of the liver, to the improvement of its general health; and this fact had been taken advantage of by some agriculturists to produce rapid fattening in a flock intended shortly for the butcher. It afterwards, by mechanical pressure on the substance of the liver, congested it, producing a condition called "rot," and the animal became jaundiced. It then, by increased local irritation, produced emaciation, and ultimately the death of the animal. The disease must be viewed from beginning to end as a local parasite. It produced no effect on the carcase except by the local disturbance it occasioned in the liver. There was no blood poisoning, and the parasites were confined to the liver of parts adjacent. There was, therefore, no *prima facie* reason for condemning the carcasses of these animals as unfit for food. The liver and other viscera should be destroyed, and the remainder might be safely used for food. Owing to the very wet season we had had for some time, and the free incubation of the ova of the flukes in the wet grass, this disease had been most prevalent of late, especially in the West of England. It had also extended to horned cattle in a smaller degree, and had, as he was informed, affected hares and some other animals. Animals affected with it had been extensively used for food from time immemorial without detriment to health, and he was not aware of any particle of evidence to show that any human disease had ever been produced by eating it; indeed, so prevalent had it been of late that he doubted whether there was a single individual in Bristol in the habit of eating mutton who had not partaken of meat from animals more or less affected with it. He had personally witnessed the presence of flukes in some very fat animals. Nevertheless, according to reports in the public papers, in some places scores of tons of meat from animals affected with the fluke had lately been *ipso facto* condemned and destroyed, and in some cases the sellers imprisoned. He considered that in this way an unnecessary hardship had been put on agriculturists when they were but little able to bear it; and a quantity of good food, offered at a very low price, within the reach of the poor had been destroyed when their means would not allow them to buy meat at the usual prices. When a breeder of sheep found a flock affected with the fluke, he generally hurried them into the market, and offered them at a low price, and the market thus became temporarily glutted. He had known fairly eatable meat of this kind sold from 2d. to 6d. per pound. He did not wish it to be understood that carcasses of fluked sheep were always fit for consumption, but they must be judged on their merits, taking no notice of the mere fact of the fluke. He had during the last six months been frequently requested to condemn these carcasses *ipso facto*, but, acting on the principles which he had explained, he had refused, to the great benefit of the poor of the city, who did not get too much animal food as prices now ruled. Public sentiment might disapprove of his views, but the public interest had benefited by his action, and the health of the people had not been injured. In connexion with this subject, he pointed out that there was no standard or recognised authority as to what diseases or as to what conditions or changes in the articles rendered them unfit for use, and said hence the poorer class of purveyors had no standard to go by, and when convicted they had no means to appeal against the conviction. Tubercle phthisis was very common in bovine cattle, and was known in the trade under the name of "pearl" or "grapes." *Prima facie* with our recent views regarding the pathology and the innocuability of tubercle its presence in a carcase intended for food would prove alarming, but it was not necessarily so. At present we had no means of recognising carcasses of animals suffering from tubercle if the parts affected had been removed, and we had no evidence that the flesh of such animals was unfit for food or injurious to health. Mr. Fleming said "there are few animals which have been kept for any length of time in cow-sheds, and fed and milked in the usual manner, which are not more or less phthisical." The advice of the same authority was, "animals slightly affected should be fattened and slaughtered."



CITY AND COUNTY OF BRISTOL
EDUCATION COMMITTEE

ANNUAL REPORT

OF THE

SCHOOL MEDICAL OFFICER

R. H. PARRY, M.D., B.S. (Lond.), F.R.C.P., D.P.H.

1943

(THIRTY-SIXTH YEAR)

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BRISTOL EDUCATION COMMITTEE

<i>Chairman</i>	-	Alderman F. C. WILLIAMS.
<i>Vice-Chairman</i>	-	Alderman A. L. H. SMITH, J.P.

Medical Services and Child Guidance Management Sub-Committee.

<i>Chairman</i>	-	Alderman F. C. WILLIAMS.
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Chief Education Officer.

G. H. SYLVESTER, B.A.

SCHOOL MEDICAL STAFF.

School Medical Officer and Medical Officer of Health.

R. H. PARRY, M.D., B.S., (London), F.R.C.P., D.P.H.

Chief Assistant School Medical Officer.

A. A. DALBY, M.C., M.R.C.S., L.R.C.P.
(on active service).

CITY AND COUNTY OF BRISTOL

Population (estimated June, 1943)	370,800
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Elementary Schools :—

Number of Schools	99
Number of Departments	161
Average Number on Registers	42,188
Average Attendance	...	...	...	34,804

SUMMARY OF WORK DONE DURING 1943.

School Medical Officers :—

No. of Visits to Elementary Schools for routine inspection	...	...	...	356
No. of Children of Code Groups examined in Schools	...	...	...	8,118
No. of Re-examinations in Schools	...	...	...	1,039
No. of Visits to Secondary Schools	...	...	...	118
No. of Children examined	...	...	...	2,992

Dental Surgeons :—

No. of Children examined	...	...	...	27,621
No. of Children treated	...	...	...	16,141

School Nurses :—

Cleanliness Survey.

No. of Visits to Schools	...	...	...	1,816
No. of Examinations of Children	...	...	...	127,275
No. of Homes Visited for uncleanness	...	...	...	2,805
No. of Homes Visited for " following-up " etc.	...	...	...	4,620

Preparation for Medical Inspection.

No. of Visits to Schools	...	...	...	431
No. of Children prepared	...	...	...	12,792

SCHOOL CLINICS.

Total Attendances - - - - 250,233

	<i>No. of Attend- ances.</i>	<i>Work.</i>
Central Health Clinic -	58,250	Inspection clinic work ; treatment of minor ailments ; ear, nose and throat clinic ; zinc ionisation ; dental treatment ; orthodontic treatment ; refraction work ; X-ray treatment of ringworm ; treatment of scabies cases ; remedial exercises ; electrical treatment ; massage and foot treatment.
Bedminster Health Centre	46,613	Inspection clinic work ; treatment of minor ailments ; ear, nose and throat clinic ; dental treatment and refraction work.
South Bristol Baths -	6,440	Treatment of minor ailments.
Knowle Casualty Station -	14,426	Treatment of minor ailments.
Mayor's Paddock Baths -	3,164	Scabies treatment.
Speedwell Health Centre -	30,635	Inspection clinic work ; treatment of minor ailments ; ear, nose and throat clinic ; dental treatment and refraction work.
Verrier Road - -	5,870	Treatment of minor ailments—mornings only.
Portway Clinic - -	18,315	Inspection clinic work ; treatment of minor ailments ; ear, nose and throat clinic ; dental treatment and refraction work.
Avonmouth Scabies Centre	233	Scabies treatment.
Southmead Clinic -	35,711	Inspection clinic work ; treatment of minor ailments ; dental treatment and refraction work.
Carlton Park Special School - -	1,626	Treatment of minor ailments.
Novers Open Air School -	13,089	Remedial exercises and massage ; treatment of minor ailments.
Chest Clinic - -	2,847	Chest ailments.
Cardio-rheumatic Clinic -	913	Cases of heart disease and acute rheumatic infection.
Artificial light Clinic -	7,893	Cases of anaemia and debility.
Child Guidance Clinic -	1,576	
Speech Clinic - -	2,473	
Orthoptic Clinic - -	159	

CITY AND COUNTY OF BRISTOL EDUCATION COMMITTEE

REPORT

of the School Medical Officer for the year ended
31st December, 1943.

INTRODUCTION

I have pleasure in presenting my annual report on the work of the School Medical Service, the thirty-sixth in the series.

In spite of shortage of staff, particularly of doctors and dentists, and many changes, the medical care and welfare of school children has been well maintained during the year.

A large number of evacuated children have again returned to Bristol, the number remaining in the reception areas at the end of 1943 being 2,440 (unaccompanied).

There is still a considerable number of children with verminous heads (see page 7). This is perhaps to be expected because home supervision of the children is much reduced by the absence of parents on war service, and re-infection of the cases is common. We are fortunate in that our standard method of treatment (Lethane Brilliantine) has proved so effective in dealing with all types of verminous conditions. Bad infestation is not common.

What is true of general uncleanness is also true of scabies, and there has been an increase in the number of cases treated during 1943. The main method of treatment, which has proved to be very effective, is with benzyl-benzoate (page 9).

Orthodontic treatment was commenced in August 1942. The year under review is the first complete year of operation of the scheme under the direction of a consultant. (page 12).

The work carried out at the Foot Clinic is a valuable addition to the School Medical Service, and there has been an increase in the number of attendances. (page 13).

The Speech Clinic has been of great benefit to the children, and in addition to the cases of speech defect, cases of asthma have been referred to the Clinic for breathing, rhythmic movement work and relaxation. Full details of the work done during 1943 are to be found on page 15 of the report.

The campaign for immunisation against diphtheria, which was carried out during the latter part of the year achieved good results and it is estimated that at least 70% of the school children in Bristol have now been immunised.

Co-operation between the School Medical Service and the Health Department in all its branches has been excellent throughout the year. It is particularly important that this shall be so in wartime, for it is impossible to separate the health of the school child from that of the family as a whole.

My best thanks are due to Mr. G. H. Sylvester, Chief Education Officer, and to his deputy, Mr. Brand, ready at all times with valuable assistance. I must also thank the teachers of Bristol for their courtesy and co-operation through another year of war.

R. H. PARRY,

STAFF.

The following staff changes have taken place during the year :—

Medical.*Resignation.*

Mary I. Meyers, M.R.C.S., L.R.C.P.—4th September, 1943.

Appointment.

Clara Jahoda, M.D. (Vienna)—11th January, 1943.

Dental.*Mobilisation.*

G. W. Vowles, L.D.S.—1st April, 1943.

Appointments.

Mrs. Jean Brown, L.D.S.—8th February, 1943.

G. W. Morgan-Fletcher, L.D.S.—Two extra sessions per week from 23rd March making a total of six sessions weekly.

Resignation.

Mrs. Jean Brown, L.D.S.—17th May, 1943.

Nursing.*Resignation.*

Miss I. M. Ralph, Matron, External Nursing Services—30th April, 1943.

Mrs. D. Hauser, resigned 30th April, 1943 and re-engaged part-time from 1st May, 1943.

Appointments.

Miss W. A. Johnson, as Matron—1st June, 1943.

Miss L. M. Bendall, as Deputy Matron—1st June, 1943.

Mrs. D. Clifford, Part-time for work in nursery schools and classes—25th January, 1943.

Mrs. G. Blower, Part-time for work in nursery schools and classes—1st February, 1943.

Miss D. Williams, as an untrained adult helper to assist in scabies bathing and the cleansing of verminous heads in the Southmead and Portway areas in accordance with the suggestion made in Board of Education Circular 1604.

Evacuation.

The following returned to Bristol from reception areas :—

Sister Honeyball—Cornwall—11th January, 1943.

Sister King—Devon—1st February, 1943.

Sister Cording—Devon—31st July, 1943.

Sister Thorne was seconded for service in Cornwall from the 4th January, 1943 and returned on the 30th April, 1943.

Child Guidance Clinic.

Miss P. M. D. Wigan, Psychiatric Social Worker at the Child Guidance Clinic resigned on the 7th September, 1943 and was replaced by Miss Isobel Munroe through the Provisional National Council for Mental Health, having been loaned to this country by the Canadian Children's Service.

SCHOOL EVACUATION.

There has been no development in connection with the evacuation of Bristol Elementary School children during the year under review and, as has been the general experience throughout the country, there has been a continual drift back of children.

No large school party evacuation has been carried out during the year, and whilst small parties of children whose cases had been specially considered were sent out from time to time, this practice is now held in abeyance on the instructions of the Ministry of Health.

Two residential nurseries were closed during the year—"Filkins," Lechlade and "The Cedars," Purton. The children were transferred to other residential nurseries.

The approximate number of unaccompanied Bristol children remaining in the reception areas at the end of the year was 2,440 of which 189 were of nursery age, 189 from Special Schools, 44 from the Junior Technical School, 21 from the Junior Commercial School and 104 from Secondary Schools.

FINDINGS OF MEDICAL INSPECTION.

A complete medical inspection was made of 8,118 children during 1943. Defects requiring treatment or observation were as follows :—

					<i>Medical Inspection.</i>	
					<i>For Treatment</i>	<i>For Observation.</i>
Skin diseases	...	...	...	...	51	2
Defective Vision	...	...	...	...	218	45
Squint	...	...	...	...	24	13
External Eye Disease	...	...	...	...	5	1
Defective hearing	...	...	...	...	8	6
Otitis media and other ear diseases	...	...	...	...	19	3
Enlarged tonsils	...	...	...	...	80	63
Adenoids	...	...	...	...	28	16
Enlarged tonsils and adenoids	...	...	...	...	74	24
Other nose and throat conditions	...	...	...	...	19	4
Organic heart disease	...	...	...	...	34	14
Functional	...	...	...	...	13	9
Anaemia	...	...	...	...	4	27
Rheumatism	...	...	...	...	3	3
Chorea	...	...	...	...	—	1
Orthopaedic and postural defects	...	...	...	...	125	27
Tb. Pulmonary definite	...	...	...	...	—	—
Tb. Pulmonary suspected	...	...	...	...	37	5
Tb. Glands	...	...	...	...	3	—
Tb. other forms	...	...	...	...	12	1
Malnutrition	...	...	...	...	3	58
For Milk and Meals etc.	...	...	...	...	10	—
Uncleanliness	...	...	...	...	34	10
Teeth	...	...	...	...	325	3
Other defect or disease	...	...	...	...	144	146

Malnutrition.

The classification of nutrition of children seen at school medical inspection in the last 3 years is as follows :—

	No. Inspected	A (Excellent)		B (Normal)		C (Sl.Sub.Nor.)		D (Bad)	
		No.	%	No.	%	No.	%	No.	%
1941	4,855	828	17.06	3,397	69.97	620	12.77	10	0.2
1942	5,656	659	11.65	4,346	76.84	627	11.08	24	0.42
1943	8,118	1,544	19.02	5,781	71.21	783	9.65	10	0.12

No. of cases referred for treatment and observation from Medical Inspection, etc.

	1941	1942	1943
	Routine M.I.	Routine M.I.	Routine M.I.
No. examined	4,855	5,656	8,118
Ref'd for treatment for malnutrition	6	8	3
Received milk/meals	19	5	6
Received C.L.O.M., etc.	8	—	4
Received observation for malnutrition	57	70	58

Nurses' Survey.

	1941	1942	1943
No. surveyed	38,853	41,430	51,801
No. referred to Clinic for malnutrition	17	38	10
No. advised to buy milk	645	735	1,056

Malnutrition cases seen at Clinic.

	1941	1942	1943
No. of cases of malnutrition seen at Minor Ailment Clinics	104	123	60

Milk and Meals.

	1941	1942	1943
Free meals supplied	188,132	172,622	146,925
Free milk/meals supplied	497,763	375,657	297,649

Uncleanliness.

	1941	1942	1943
No. of individual children found with verminous heads	3,605	4,009	5,051
Exclusions from school for verminous head	795	474	327
Prosecutions for verminous head ...	33	30	35

In accordance with the recommendations contained in Circular No. 2831 an intensive effort has been made during the year to combat the problem of verminous conditions in school children.

The four partly trained women helpers appointed in the latter part of 1942 have been actively engaged during the whole of the year in dealing with the treatment and cleansing of children found to be verminous. 2,290 individual children were treated in this way during the year for varying degrees of exanimous conditions. The number of nurses' visits to schools for the purpose of examining children was considerably increased, 1,816 visits being made during the year as against 1,370 in 1942. The increased activity in this direction is reflected in the larger number of individual children found with verminous conditions, the total being 5,051 as compared with 4,009 in 1942.

The number of exclusions from schools for verminous heads is lower again this year. Owing to the number of mothers on war work, the policy adopted last year of not excluding children unless absolutely necessary is being continued. Close attention has been paid to the "family aspect" of the problem, and where a child is found to be verminous the home is visited and arrangements made for all other children in the family, whether "school" or "under school" children, to be examined and treated.

The large number of mothers on war work has increased the difficulty of interviewing, many visits having sometimes to be made before the mother can be seen. The problem of the indifferent mother, too, has been accentuated by war-time conditions, and 35 parents had to be prosecuted during the year compared with 30 in 1942.

The standard treatment, using Lethane Brilliantine, was carried out during the year and proved effective in dealing with all types of verminous conditions.

SCHOOL NURSES.

Following is a summary of the Nurses' Survey for the year :—

No. of sessions	1,166
No. of children surveyed	51,801
No. with defects	5,200

Of the cases with defects :—

No. already under treatment	517
No. referred to clinic doctor	1,650
No. referred to clinic Eye Specialist	1,219
Minor ailments referred for treatment	616
Underweight children advised to have milk in school	1,056
Will attend own doctor or Hospital	120
Refusals	22

Of the cases referred to Clinic Doctor :—

No. requiring treatment or observation	1,219
No. discharged—no treatment or observation required	51
No. already obtained treatment	1
No. failed to attend clinic	379
	1,650

The defects referred to Clinic Doctor requiring treatment, or to be kept under observation, were :—

Skin	264
Scabies	300
Eye disease	70
Defective vision	45
Ear disease	33
Nose and Throat	243
Teeth	1
Lungs	4
Deformities	24
Malnutrition	10
Other defects or diseases	314
	1,308

Visits to schools in respect of verminous conditions, skin diseases and general neglect numbered 1,816; 127,275 examinations (including 3,533 re-examinations) of children having been made.

Co-operation between nurses and head teachers is very close, and the valuable assistance given by teachers and school attendance officers is greatly appreciated.

Home Visiting.

During the year the number of visits for the purpose of "following up" defects, etc., was 4,620. Other visits in regard to uncleanness, etc., totalled 2,805.

TREATMENT.

The total number of attendances at the clinic during the year was 250,233.

Skin Clinics.

Scalp Ringworm. 86 cases of scalp ringworm were dealt with during the year, and all except three were treated at the Committee's clinics, 48 by X-Ray—35 otherwise.

The number of cases of scalp ringworm among school children diagnosed at Minor Ailment Clinics during 1943 was 105 (103 Elementary and 2 Nursery). Nineteen of these were, however, subsequently diagnosed by Dr. Bell at Central Clinic as not ringworm, leaving a net figure of 86 (84 Elementary and 2 Nursery). This compares with 35 (34 Elementary and 1 Nursery) in 1942 and 26 (Elementary) in 1941.

The increase last year was due to a large number of cases from the Knowle West area—60 definite cases being reported from Bedminster Clinic—mainly from Connaught Road and Ilminster Avenue Schools. Of the 86 cases confirmed, 48 were treated by X-Rays, 35 by drug treatment at the Clinic, and 3 were treated by own Doctor or hospital.

The cases treated by X-Rays in 1943 and the two preceding years are as follows :—

	1941	1942	1943
Elementary Schools ...	20	29	47
Nursery Schools ...	—	1	1
Total ...	20	30	48

X-Ray Treatment.

Dr. F. Gower Bergin, who is in charge of this department, reports as follows .—

“ There has been an increase in the number of scalp ringworm cases treated this year. One interesting point is the number of patients who trace their infection to contact with cats with body ringworm. This is rather worrying as the cats are presumably still at large and liable to infect others.

The Victor X-Ray Tube has proved a very good investment and is doing excellent work.”

Body Ringworm.

There was also an increase in the number of cases of body ringworm in 1943, 389 school cases being diagnosed as against 309 in 1942 and 209 in 1941. Again this increase was from the Bedminster area, 178 cases having been referred from Bedminster Clinic.

The nurses have kept the schools concerned under close observation, and in Connaught Road School, have made complete examinations on two occasions of all children in the school, for the purpose of ascertaining any children with ringworm who may have been missed.

During 1943, 389 cases of this disease were under observation, of which 387 were treated at the school clinics.

Impetigo. The school clinics treated 1,881 cases of impetigo during the year, a rapid cure being effected in all cases.

Scabies. The following table shows the number of scabies cases treated in 1943 and the two preceding years.

	School cases	“Under School” cases	Adults	
			Women	Men
1941	2,062	577	1,181	582
1942	3,927	1,017	2,405	1,313
1943	3,197	1,014	2,523	1,089

The number of scabies cases dealt with each month in 1943 is as follows :—

	<i>School cases</i>	<i>"Under School" cases</i>	<i>Adults</i>	
			<i>Women</i>	<i>Men</i>
January ...	291	90	257	134
February ...	375	117	261	106
March ...	390	74	234	111
April ...	285	103	236	77
May ...	177	72	186	77
June ...	225	63	143	82
July ...	285	86	252	90
August ...	183	62	159	68
September ...	305	86	177	94
October ...	293	131	254	108
November ...	226	73	220	82
December ...	162	57	144	60
Total ...	3,197	1,014	2,523	1,089
Comparative Total 1942 ...	3,927	1,017	2,405	1,313

The numbers of scabies cases in 1943 generally were much the same as last year except amongst school children, where there was a slight drop as compared with 1942—3,197 cases as against 3,927. Treatment with Benzyl Benzoate solution has been continued throughout the year, except in the case of very young children who are treated with Sulphur Cream. The patients' personal clothing and bedding are disinfected in all cases.

An additional scabies treatment centre was opened in April at Avonmouth and this has proved of great assistance in dealing with cases in the Avonmouth Sea Mills and Shirehampton areas.

In November, the treatment of women and children patients was transferred from the Mayor's Paddock Baths to the Gas Cleansing Station in Marybush Lane, near the Central Clinic.

Eye Clinics.

Mr. R. R. Garden, M.B., Ch.B., D.O.M.S., the Committee's Ophthalmic Surgeon, reports as follows :—

"During 1943 a total of 3,345 school refraction cases attended the clinics, including 2,924 from elementary, 377 from secondary, 17 from nursery schools and 27 from Special Schools. In 552 of the new cases, spectacles were not ordered, but a number of them will attend for periodical observation. Altogether 1,793 pairs of spectacles were supplied by the school opticians for children examined through the Committee's scheme, and 2 by other opticians. In 9 cases, the parents made their own arrangements for the examination and purchase of glasses.

The number of attendances for the treatment of external eye diseases during 1943 was 4,552.

New squint cases numbering 162 and 552 from previous sessions (kept under observation or treatment), attended during the year. Of the new patients, 72 came from the Maternity & Child Welfare Department and 15 from Nursery Schools.

The work of the Orthoptic Clinic at the Eye Hospital was interrupted for a time during the year owing to changes of staff, and a reduction occurred in the number of attendances. The following table shows the work done at this clinic during 1943 :—

Total number of cases examined for the first time	...	20
Total number receiving treatment during the year	...	15
Number improved	...	8
Number receiving treatment twice weekly at the end of the year	...	6
Total number of attendances for treatment	...	139

In addition to the cases treated by orthoptics, 36 Bristol school children who have attended the Committee's Eye Clinics or my out-patient clinic at the Eye Hospital have had the operation for squint with satisfactory results. In practically all such cases, the Orthoptist carried out an examination before and after operation for the purpose of estimating the type and angle of the squint, the effects of the surgical work done, and to ascertain if orthoptic exercises were also advisable to help in the cure."

Provision of Spectacles.

Glasses are supplied at contract prices through opticians appointed by the Committee and when parents cannot pay the amount due at once, arrangements are made whereby instalments are collected by the Attendance Officers.

Spectacles obtained through school contract arrangements	199
Purchased by parents through school opticians	... 1,594
Purchased privately	... .. 11
	<hr/> 1,804 <hr/>

Defects of Nose and Throat.

The number of children found suffering from the above ailments was 1,989 of whom 915 received treatment. Operative treatment of enlarged tonsils and adenoids is performed at the various City Hospitals, 746 cases being so treated.

Aural Clinics.

Mr. Gordon R. Scarff, F.R.C.S. (E) the Aural Surgeon reports as follows :—

"During the past year, the number of children suffering from aural defects attending the clinic was 235, of whom 159 were suffering from middle ear suppuration.

The treatment of middle ear suppuration is being carried out on the same lines as before—that is dry cleansing of the ear followed by the insufflation of iodised boracic powder. 51 of the more chronic cases have been treated weekly by ionisation. In 9 cases the discharge has cleared up.

When there is any focus of infection in the nose or throat, these cases are referred to the various hospitals for treatment.

The number of chronic cases continues to be small, 42 children were attending for treatment at the end of the year, of whom a small proportion were cases of recent suppuration.

School cases for diagnosis as to enlarged tonsils and adenoids numbered 370, and 27 were also referred from the Maternity and Child Welfare Department."

Child Guidance Clinic.

Dr. Frank Bodman, the Acting Director, reports :—

"The Child Guidance Clinic is now working to capacity. There has been a further increase in the work of the various departments of the clinic, the total number seen in the clinic being 485 compared with 428 last year.

The weekly case-conferences continue to serve as a useful medium for demonstrating the work of the clinic to persons interested in the Social Services and child guidance work.

The Bristol Child Guidance Clinic has been recognised as a training centre for child psychiatrists by the Provisional National Council for Mental Health.

There has been an increase in the number of cases referred directly by parents, and also by Probation Officers after the young persons have been put on probation.

There has also been a considerable increase in lectures given by members of the staff of the clinic. Lectures have been given to School Medical Officers, to allied Social Workers, and a number of French Social Workers by arrangement with the British Council. Lectures have also been given in a post graduate course arranged by the College of Nursing; to Youth Leaders by arrangement with the Youth Committee, and to A.T.S. Officers by arrangement with the University of Bristol. These lectures have proved of great value in putting across a psychological angle to responsible members of the public."

In addition to the cases seen at the Child Guidance Clinic, the following numbers have also been examined by the Psychologist :—

* At the Clinic	452
In Schools	184
In Childrens' Hospital	60
In Remand Home	31
Re-examined in Special Schools	39
	<hr/>
	766
	<hr/>

* 33 cases in addition to this number were seen by the Psychiatrist only.

Dental Clinics.

Mr. W. H. B. Stride, L.D.S., Supervisory Dental Surgeon, reports as follows :—

"The number of whole time dentists has been reduced to 4 by the call up for military service of Mr. Vowles on 1st April. The panel of part-time practitioners now give 18 sessions each week and in addition 2 sessions are given to Emergency Medical Services at Southmead. This has of necessity again resulted in a reduction in the amount of school work that could be undertaken, but fortunately it will be possible to increase the staff again early next year.

On an average, 12 sessions a week are given to health work by the full-time staff. The number of elementary children inspected in school was 23,860. In addition 1,054 nursery school children were inspected and treatment was given to 275 children in secondary schools. The inspection sessions numbered 203 as against 2,239 devoted to treatment, a ratio of 1 : 11.

The number of casual cases seen was 2,264.

Particulars of the work done by the school dentists for mothers and young children under the joint scheme of the Education and M. & C.W. Committees are as follows :—

	Mothers		Pre-School children
	Expectant	Nursing	
New cases	934	247	629
Attendances - ...	2,544	531	883

This occupied 305 sessions of the dentists' time.

Orthodontic Treatment.

Since the orthodontic work was commenced in August 1942, 440 cases have been examined and 240 referred to the Dental Hospital for appliances. The number dealt with by extractions at the clinics was 207. Parents are showing themselves very keenly interested in this special work and make every effort to attend the orthodontic session, and this is resulting in very good attendances."

New cases	294
No. referred for treatment at Dental Hospital	146
No. referred for treatment at Central Health Clinic	168
X-Rays	106
Impressions	275

Orthopaedic and Postural Defects.

Mr. Hubert Chitty, M.S., F.R.C.S., the Orthopaedic Surgeon, reports as follows :—

" Very extensive use is made of the Orthopaedic Clinic. Postural and other defects are usually detected by the School Medical Officers at a very early stage and promptly sent up for treatment. This minimises the need for surgical intervention, and those cases which do require hospital treatment are admitted with very little delay. The results obtained continue to be very satisfactory."

Foot Clinic.

The clinic for the treatment of minor foot ailments opened under the direction of a member of the Incorporated Society of Chiropodists (who is working in a voluntary capacity) has continued to operate during the year.

The number of children treated at the Foot Clinic showed a steady increase during the year and reached the total of 308 which was made up as follows :— School children—288 (elementary 254 ; secondary 34) and under school age—20. Treatment was also given to a few mothers from the ante-natal clinics.

Treatments given numbered 1,324. There were 114 cases of verrucae. The next largest classification was that of foot deformities including hallux valgus, hallux rigidus, pes cavus and pes planus. As these were mostly in the very early stages they were dealt with by remedial exercises and alterations to footwear. It is interesting to note that there was no case of real flat foot, although a few were seen which might have developed in that direction.

It was found necessary to refer approximately 30 cases to the orthopaedic department. In about six or seven of these, surgical operation was found to be necessary, the remainder being dealt with by physics, therapy and massage.

One of the great difficulties, due to war conditions, is the repairing and altering of footwear but this should disappear when peace returns. This clinic makes a valuable addition to the treatment services already given at the health centres.

The following is a summary of defects treated :—

	<i>Elementary</i>		<i>Secondary</i>	
	<i>1st</i>	<i>Other</i>	<i>1st</i>	<i>Other</i>
Hammer toes ...	8	84	1	5
Metatarsalgia ...	21	45	2	4
Verruca ...	100	425	14	68
Pes cavus ...	8	58	2	1
Foot strain ...	71	203	10	22
Miscellaneous ...	46	113	5	8
	254	928	34	108

The total attendances of school children for treatment during the year were 1,324. (20 cases of children under school age were also seen).

Heart Disease and Rheumatism.

Professor C. Bruce Perry reports :—

“ The work of the clinic has continued as usual. The figures call for little comment, except that the number of cases of rheumatic heart disease and chorea, recommended for institutional treatment, increased from 28 to 37. This reflects the increase in the incidence of the disease which occurred in the spring of 1943 and which checked the downward trend noted in previous years. This has not been peculiar to Bristol but has been noted all over the country.

SUMMARY OF CASES ATTENDING CARDIO-RHEUMATIC CLINIC.

	No treatment or restriction.	No treatment, but restriction of games.	Treatment, and attend school.	Treatment, and exclude from school.	Institutional treatment.	TOTAL.
NEW CASES.						
Rheumatic Heart Disease	7	7	—	1	17	32
Chorea	2	—	1	—	9	12
No Organic Disease	143	—	2	—	—	145
Congenital Heart Disease	15	1	—	—	1	17
Doubtful	1	—	—	1	4	6
	168	8	3	2	31	212
RE-EXAMINATIONS.						
Rheumatic Heart Disease	255	56	15	5	11	342
Chorea	67	—	1	1	—	69
No Organic Disease	150	—	—	—	—	150
Congenital Heart Disease	43	13	11	8	—	75
Various	1	1	—	—	—	2
	516	70	27	14	11	638
Summary of individual children examined						
No. of individual children examined	...	...	...	...	...	595
No. of new cases for 1943	...	...	...	...	...	212
No. of re-examinations	...	...	...	...	...	638
Total No. of attendances	...	...	...	...	...	850

Chest Clinic.

1,034 children were examined by the Tuberculosis Officer, of which 343 were old cases and 601 new. Of the latter, 23 were classified as definite pulmonary tuberculosis, 28 as cases of non-pulmonary tuberculosis and 640 as non-tubercular.

Artificial Sunlight Clinic.

During 1943, 347 children of school age were given artificial sunlight treatment. Full details of the cases are given below :—

<i>Defect</i>	<i>No. Treated</i>	<i>Improved</i>	<i>Stationary</i>
General Debility	96	68	28
Bronchitis	33	30	3
Coughs, etc.	35	22	13
Enlarged glands	42	30	12
Malnutrition	8	8	—
Other defects	133	91	42
	347	249	98

Speech Clinic.

Miss D. Wilson, M.S.S.T., reports :—

“ During the spring and summer terms the work of the Speech Clinic was carried on in the five school centres. Lack of quiet and little chance to grade the classes made the work very difficult. The preponderance of speech defects, the wide difference in ages and the lack of waiting room accommodation made it impossible for the stammerers to do good, steady work. The work of the clinic was coming down to the level of the dullest children.

On August 16th the Speech Clinic opened at Lime Tree House. This gave us one large room for class work, with a small adjoining room for the sand trays. This room can also be used by the doctor when seeing the children with the mothers. There is also a good waiting room. The whole clinic is pleasant and light and has a delightfully happy atmosphere. The quality of the work has improved accordingly.

The move from the five centres to the one, meant losing many younger children who had been able to come alone when the clinic was near their school. This was not as serious as it appeared. Young children coming to the clinic without the mothers made very little progress, since it is most important to have the mother's help for the daily practice.

There was a long waiting list in August. This was gradually cleared, filling the places of the children who had been discharged or had discontinued attendance.

Sessions. Seven sessions per week are devoted to the work, five as class sessions, one for interviewing new cases or for examination of children by the doctor, and one session for writing.

In November, asthma cases were referred to the Clinic. Prior to this the only asthma cases taken had been those needing help for speech or stammer.

Asthma cases are taken for breathing, rhythmic movement work and relaxation. Special attention is given to re-education of parent and child. All cases are seen by Dr. Irving-Bell soon after admission and again whenever extra advice is needed. Already these children are standing better, looking well and attacks of asthma are lessening. The register now numbers :—

Speech Defects ... ..	...	...	30
Stammerers ... ..	...	...	30
Stammer and Speech Defect ... ..	...	...	11
Asthma ... ..	...	...	12
Asthma and Stammer ... ..	...	...	3
Asthma and Speech Defect ... ..	...	...	3
			89

The waiting list now numbers over 50 and more names are coming in every week.

Cases of asthma and stammer are admitted with as little delay as possible. Cases of speech defect are having to wait. These cases need individual attention and already each session has more speech defect cases than can be dealt with in the allotted time. Therapist and children are having to work overtime.

Parents and children are unanimous in their praise of our new premises."

Medical Treatment of the Pre-school Child.

The following cases were dealt with during the year :—

Eye Disease	...	...	...	...	103
Otorrhoea	...	...	...	...	169
Skin diseases	...	...	...	...	655
Minor ailments	...	...	...	...	275
Aural Surgeon's cases	...	...	...	...	44
Eye Specialist's cases	...	...	...	...	129
Heart Specialist's cases	...	...	...	...	—
Orthopaedic Specialist's cases	...	...	...	...	195
Various	...	...	...	...	278
					<hr/> 1,848 <hr/>

INFECTIOUS DISEASE.

The number of cases of diphtheria occurring in children of school age during the year was 152 as compared with 187 in 1942. The deaths from this disease were 4 as against 5 in the previous year. There were 8 cases of cerebro-spinal fever as compared with 7 cases in 1942.

During 1943, 6,430 children of school age received a full immunising course of inoculations against diphtheria.

The complete figures for the year are as follows :—

Number given full course of immunising inoculations	...	6,430
Number given a " booster " injection	... ..	3,282

As a war-time measure the routine schick-testing of children who received a course of inoculations has been discontinued.

Immunisation against Diphtheria.

During the latter part of 1943 a vigorous campaign was undertaken through the schools and clinics to endeavour to obtain the immunisation of all Bristol children who had not yet been immunised. With the willing co-operation of the head teachers a special effort was made to secure the consent of those parents who had previously refused. In the cases of children who had been immunised two years or more previously, a single booster dose was recommended.

Altogether, 6,430 children of school age were given a complete immunising course, and 3,282 received the booster injection.

It is estimated that at least 70% of the school children in Bristol have now been immunised.

PHYSICAL INSTRUCTION.

Mr. J. Mc A. Milne, Chief Organiser of Physical Training, reports :—

" The general standard of the work is still seriously affected by the lack of suitable teachers, but every endeavour has been made to see that all children regularly obtain a reasonable amount of physical activity. The boys' work has suffered more than that of the girls owing to the number of men being in the Services.

It has been found advisable to broaden the scope of activities and the number of classes attending swimming during the year has been considerably increased. The swimming results have been very satisfactory, as the number of Corporation Swimming Certificates obtained this year has been a record. The actual number obtained was 2,803 which is approximately 300 greater than the pre-war record.

The number of fields used as Games Centres for youths and adults, opened during the summer months, was increased to six, and all these fields which provided facilities for adolescents and adults playing games or taking part in athletic practices were used to capacity."

PROVISION OF MEALS.

The service of meals has continued to develop during 1943 and at the end of the year 980 children were receiving free meals and approximately 9,500 on payment. Facilities for school meals are available in all the municipal secondary, technical, nursery and special schools and exist in 136 elementary school departments. There are 31 kitchens in the city producing school meals and plans are in hand for the erection of several new kitchens.

During the year 146,925 free dinners have been supplied as compared with 172,622 in 1942. In addition 297,649 free milk meals were given.

Milk in Schools.

The supply of milk under this scheme was continued, the arrangements being supported by Head Teachers as in former years. The return taken in October 1943 showed that 81.39% of the children in elementary schools were receiving milk either free or on payment.

CO-OPERATION OF PARENTS.

The number of parents present at elementary school medical inspections was 5,222 (64.33%) compared with 4,458 (78.82%) last year.

MISCELLANEOUS.

The following report has been received from Mr. L. A. Tavener, Employment of Children Inspector :—

During the year there were 1,223 cases of infringement of the Children and Young Persons Act, 1933, and Bye Laws made in pursuance thereof :—

By employers	...	...	...	561
By parents	...	...	...	566
By street traders	...	...	...	16
Prosecutions, etc.	...	...	...	80
				—
				1,223

These were dealt with as follows :—

Warned	...	...	...	1,143
Final Notices	...	...	...	28
Prosecutions :—				
Pending	...	...	...	4
Withdrawn	...	...	...	4
Employment cards revoked	...	...	...	3
Employment cards refused	...	...	...	41
				—
				1,223

During the year 399 children between 13 and 14 years of age were registered for employment, and 1 licence issued and 1 renewed for street trading for children from 16 to 18 years of age.

Entertainments.

One licence for a child to take part in public entertainment under the Children and Young Persons Act, 1933, was refused, and one licence granted by an outside Authority.

1,493 children were granted permission to take part in 50 entertainments given for charitable purposes.

STATISTICAL TABLES.

ELEMENTARY SCHOOLS.

TABLE I.—MEDICAL INSPECTIONS OF CHILDREN ATTENDING
PUBLIC ELEMENTARY SCHOOLS.

A.—ROUTINE MEDICAL INSPECTIONS.

Number of Inspections :—

Entrants	...	...	...	...	...	3,616
Second Age Group	...	...	...	...	...	101
Third Age Group	...	...	...	...	...	4,401
						<hr/> 8,118 <hr/>

No. of other Routine Inspections :—

(Medical Survey)—No. of children surveyed	—
Grand Total	<hr/> 8,118 <hr/>

B.—OTHER INSPECTIONS.

Number of special inspections and re-inspections	...	52,372
--	-----	--------

TABLE II.

CLASSIFICATION OF THE NUTRITION OF CHILDREN INSPECTED DURING
THE YEAR IN THE ROUTINE AGE GROUPS.

Number of Children Inspected	A (Excellent)		B (Normal)		C (Slightly subnormal)		D (Bad)	
	No.	%	No.	%	No.	%	No.	%
8,118	1,544	19.02	5,781	71.21	783	9.65	10	0.12

TABLE III.

GROUP I.—Treatment of Minor Ailments (excluding uncleanness).

Total Number of Defects treated or under treatment during the year under the Authority's scheme :— 23,527

GROUP II.—Treatment of Defective Vision and Squint.

	Under the Authority's scheme
Errors of Refraction (including Squint) ...	2,898
Other defect or disease of the eyes (excluding those recorded in Group I) ...	23
TOTAL ...	2,921

Number of children for whom spectacles were

(a) Prescribed	...	...	...	1,588
(b) Obtained	...	...	...	1,557

GROUP III.—Treatment of Defects of Nose and Throat.

Number of Defects	Under the Authority's Scheme
Received Operative Treatment ...	—
Received other forms of Treatment ...	166
Total number of defects treated ...	166

TABLE IV.

DENTAL INSPECTION AND TREATMENT.

(1) The number of children inspected by the Dentist—				
(a) Routine age groups	...	...	...	23,860
(b) Specials	...	...	...	1,883
(c) TOTAL (Routine and Specials)	...	...	...	25,743
(2) Number found to require treatment				
(3) Number actually treated	...	...	...	16,726
(4) Attendances made by children for treatment	...	...	...	15,515
(5) Half-days devoted to :—				
Inspection	...	...	...	203
Treatment	...	...	...	2,239
TOTAL*	...	...	...	2,442
(6) Fillings :				
Permanent Teeth	...	...	...	9,634
Temporary Teeth	...	...	...	642
TOTAL	...	...	...	10,276
(7) Extractions :				
Permanent Teeth	...	...	...	4,083
Temporary Teeth	...	...	...	17,965
TOTAL	...	...	...	22,048
(8) Administrations of general anaesthetics for extractions				
				10,106
(9) Other operations :				
Permanent Teeth	...	...	...	3,875
Temporary Teeth	...	...	...	427
TOTAL	...	...	...	4,302

* In addition, 305 sessions were devoted to the treatment of mothers and young children.

TABLE V.

VERMINOUS CONDITIONS.

(i) Average number of visits per school made during the year by school nurses	...	...	...	...	...	11.6
(ii) Total number of examinations of children in the schools by school nurses	...	...	...	...	...	127,275
(iii) Number of individual children found unclean	...	...	...	...	...	5,051
* (iv) Number of individual children cleansed under Section 87 (2) and (3) of the Education Act, 1921	...	...	...	...	...	—
(v) Number of cases in which legal proceedings were taken :—						
(a) Under the Education Act, 1921	...	...	...	...	...	15
(b) Under School Attendance Byelaws	...	...	...	...	...	20

* 2,290 individual children were however, treated for varying degrees of verminous condition at the clinics (with parents consent).

TABLE VI.

BLIND AND DEAF CHILDREN.

	1	2	3
	At a Public Elementary School	At an institution other than a Special School	At no School or Institution
Blind children ...	—	2 at private school	—
Deaf children ...	5	1 at private school	2

CITY AND COUNTY OF BRISTOL

Report

OF THE

Mental Deficiency Acts
Committee

For the Year 1943

CITY AND COUNTY OF BRISTOL

Mental Deficiency Acts Committee

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Medical Officer of Health.

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- G. de M. RUDOLF, Esq., M.R.C.P., M.R.C.S., D.P.H., D.P.M.
Visiting Medical Psychologist (On Active Service).
- J. L. FAULL, Esq., M.R.C.S., L.R.C.P., D.P.M.
Visiting Medical Officer.
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- Miss MARGARET E. HOGARTH, *Matron.*
- Rev. A. WALMSLEY, *Chaplain (Church of England).*
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CITY AND COUNTY OF BRISTOL

MENTAL DEFICIENCY ACTS, 1913-1938

In pursuance of Article 12 of the Mental Deficiency Regulations the appended report on the work of the Council under the above Acts for the year ended 31st December, 1943, is submitted.

Part I deals with Hortham Colony Certified Institution.

Part II deals with the domiciliary work connected with defectives carried out by the Medical Officer of Health.

A statement of the expenditure and income for the year ended 31st March, 1944, is also appended.

F. J. BURGESS,
Chairman.

The Council House,
Bristol.
May, 1944.

PART I.

HORTHAM COLONY

To the Chairman and Members of the
Mental Deficiency Acts Committee.

Mr. Chairman, Ladies and Gentlemen

I have the honour to submit my report for the year ended
31st December, 1943.

					Adults		Children		Total
					M	W	B	G	
Number of patients resident					223	213	116	69	621
" " " on licence					81	88	5	2	176
" " " at hospitals					—	5	—	—	5
" " " at mental hos.					—	3	—	—	3
" " " absconded					1	—	—	—	1
					305	309	121	71	806
							M	F	Total
Number of Bristol patients resident							183	125	308
" " " " on licence							47	48	95
							230	173	403
Number of Out County patients resident							156	157	313
" " " " " on licence							39	42	81
							195	199	394

MOVEMENTS OF PATIENTS DURING THE YEAR

Admitted	..	..	..	..	..	50	45	95
Discharged and removed	..	..	..	..	..	23	48	71
Written off books whilst on licence	..	..	..	..	..	17	42	59
Deaths	..	..	..	..	..	7	6	13
Removed to Mental Hospitals	..	..	..	..	..	—	3	3
Discharged from Order	..	..	..	..	..	15	25	40

Health of Patients.

An outbreak of influenza occurred in the later months of the year which affected 98 patients. The condition was of a sharp type, coming on suddenly, with a high temperature, headache and general pains. The acute phase lasted on the average for about 2 or 3 days, but convalescence was slow in many cases and there was a tendency to recurrence.

Apart from this, there was little serious illness throughout the year and the standard of health of the patients remained generally good.

The incidence of dysentery was reduced by more than one half from the previous year, and, when the condition occurred, it was successfully treated with sulphaguanidine.

The occurrence of tuberculosis has also decreased, only 4 fresh cases being discovered. Deaths from this cause were reduced from 14 in 1942 to 4 in 1943.

Twenty-eight patients were transferred to Southmead Hospital for special surgical and medical treatment and 4 patients suffering from infectious diseases were sent to Ham Green Hospital. Special treatment was also arranged for at the out-patient departments of the Bristol Royal Infirmary and at the Bristol Central Clinic.

Twenty-one X-rays and other examinations were carried out at Southmead Hospital, and I have again to thank Dr. P. Phillips, the Medical Superintendent of that Institution, for the helpful assistance he is always so ready to give.

All patients admitted during the year have been tested for scarlet fever and diphtheria and where necessary have received protective treatment. This precaution has reduced the number suffering from these diseases to a minimum. New admissions have also had dysentery tests, and in order to detect possible carriers regular tests have been carried out in respect of those patients who have suffered from the condition.

Six hundred and thirty-six bacteriological specimens were examined at the Department of Preventive Medicine, Canynge Hall, Bristol.

Your consulting staff have continued to attend as required ; and dental sessions have been held weekly in the colony.

Activities of Patients.

The demand for patient labour, which has been growing gradually since the scheme was started some years ago, has increased during the year. Local farmers are very pleased to avail themselves of this assistance and have stated that they do not know what they would have done without this help in these times of increased agricultural activity. As many as 60 adult male patients have been sent out in a single day for potato picking and harvesting the corn crops. In addition, an average of 23 patients have been employed in regular daily work on farms or

gardens in the locality. Employers speak highly of the work done by the patients and there has not been a single complaint of misconduct of any kind.

The arrangement of sending patients out in this way has important advantages. The privilege is much sought after and the patients endeavour to prove by their work and their conduct, in the Colony that they can be trusted. It tends to inspire confidence and control in the patients and an understanding of their obligations to themselves and others. By this arrangement it is possible to test patients before giving them the increased latitude of licence, and it is satisfying to be able to report that patients who have commenced in this way have, on the whole, done well when given the greater privilege of licence.

Despite circumstances arising out of the War the normal activities of the Colony have been well maintained, and it has been possible to carry on the work of the Colony and provide for the leisure hours of the patients with little or no curtailment. The workshops continue to function and to provide useful training, at the same time contributing to a large extent to the colony requirements in the way of clothing, footwear and brushes; and in addition to which a considerable volume of repair work is carried out. As is to be expected, materials are not in such good supply as we would like, but owing to the foresight of the Steward an acute shortage of essential materials has not been experienced.

Apart from the agricultural work outside the Colony referred to earlier in the report, many male patients have been employed on the Colony farm and gardens. Since the outbreak of War the area of land under cultivation has been increased. Parties of female patients were also employed in potato harvesting and weeding.

Good crops have been obtained. Hay, oats, barley and dredge-corn have been grown in addition to all the potato and vegetable requirements of the Colony. As in previous years patients have been encouraged to cultivate small vegetable plots and the gardens surrounding the lodges.

Recreational activities have also been kept going, for occupation in the hours of leisure is just as important in its way as during working hours. Apart from the fact that patients are much happier and less difficult to control if kept occupied it has a stimulating effect on those who are inert and require rousing, and it provides an outlet and an interest for those who are less stable and who would probably find some mischief or other to occupy them if left to their own devices.

Outdoor games,—cricket, football, hockey—for females, net-ball and mixed tennis—have been played in season, and matches against outside teams played regularly.

During the winter months dancing, cinematograph shows and whist drives have been arranged so that there has been some special feature or two each week. During the autumn it was possible to increase the cinematograph shows to one each week.

Only the younger children were included in the school concert which took place in December, and considering the mentality of those taking part it was a very creditable effort.

New talent had to be found for the adult concert which also was held in December, as most of the regular performers had gone out on licence, but despite this, the concert was well up to the usual standard. Several concerts were given locally by the adult and children's concert parties for charitable purposes.

The Annual Sports, which was attended by the Lord Mayor and Lady Mayoress (Councillor H. A. Wall and Mrs. Wall), was favoured by good weather and provided an enjoyable day for all.

Licence.

	M	F	Total
No. of patients on licence at end of year 1943..	86	90	176
No. of patients granted licence during 1943 ..	53	78	131
No. of patients returned from licence during 1943	16	46	62
28 of which were from licence during previous years and			
34 of which were from licence granted during current year.			

Of the 62 patients returned from licence

29 were from hostels

21 from employers

12 from parents

Reasons for return were

(a) 9 for serious offences—stealing and sexual.

(b) 42 trivial fault of patient—mainly failure to settle.

(c) 11 no fault of patient—for treatment, unsuitability, change of circumstances.

It has always been the policy of the Committee to grant licence to those who are considered suitable. The history of the patient and the supervision and control available are carefully considered before licence is granted, but no matter how careful the consideration given it is not possible to count on the reaction of the individual, for a patient who appears to have become stabilised and dependable as evidenced by behaviour in the Colony often reacts quite differently when subjected to the sudden change of comparative freedom of licence.

Returns of patients from licence have been due, with few exceptions, to trivial offences of an impulsive and senseless kind associated with instability and lack of control and an understanding of their obligations and interests. In some cases a lack of understanding and consideration by those in charge has contributed to the failure of patients to settle down.

There are still many high grade patients in the Colony who have been here for long periods and have not been granted licence owing to their undependable ways. Of the large number of patients who have been discharged from Order after trial for a period of two years or more on licence only a very small percentage has had to be re-certified. Many of those discharged are now in regular employment and are self-supporting.

During the year 36 patients have been discharged from Order—16 by order of the Board of Control, 20 by operation of law—order lapsed, and of this number 5 patients who were discharged by operation of law have been re-certified.

School.

The school is divided into five classes. The average daily attendance at school was 96 children—57 males and 39 females. The higher grade children receive instruction in reading, writing, arithmetic, physical training, gardening and concert work. Play, in which every-day situations are staged is another feature, and physical exercises and organised games are included in the curriculum.

A canteen has been provided in the school so that children may obtain experience in choosing, buying and selling—thus helping them to gain understanding of money values. The higher grade children attend the workshops three afternoons in each week for instruction in various trades and handicrafts.

Miss McDorwall and Montessori apparatus is used with the lower grade patients. Training is provided in sense development, hygiene, object and picture lessons, simple movements and games to music. The children are encouraged in free play, balancing and co-ordination exercises, and very simple forms of handwork.

Male adult patients attend classes each Saturday morning for instruction in reading and writing.

Guides and Scouts.

Weekly meetings have been held and outings arranged, and other special privileges granted, including parole outside the Colony to selected Scouts. Special attention has been given to training in first aid and fire fighting. The Guides staged an incident as a display on Sports Day, which was very efficiently carried out.

Visits.

Miss R. Darwin, Senior Commissioner of the Board of Control, made the statutory visit to the Colony on 10th December, 1943. A copy of the report on this visit has been circulated to the members of the Committee.

Buildings.

The buildings have been maintained in a good state of repair.

A.R.P. Service.

Regular instruction has been given in fire fighting, and all available members of the staff have attended a special course of lectures and have passed the practical test in dealing with fire bombs and obtained the certificate of training for fire guards.

I have again to thank all members of the staff for the way they have co-operated in the fire watching scheme.

Lectures.

Lectures and demonstrations on mental deficiency have been given to medical students and social workers from Bristol University, and to the nurses taking the course in Public Health training under the Medical Officer of Health.

Staff.

The strength of the female staff improved during the year but it is still not up to full requirements. The shortage has been felt particularly during the leave period, but even so it was possible to arrange for all staff to have the full period of leave. There have been no changes in male nursing staff during the year.

Five female nurses were successful in the preliminary examination of the Royal Medico-Psychological Association and six female and two male nurses were successful in obtaining the certificate of the Royal Medico-Psychological Association in Mental Nursing.

Several of the 15 members of the staff who are in His Majesty's Forces are serving overseas, and I am pleased to report that all are safe and well. One, Sergeant A. Mills, R.A.F., has been awarded the British Empire Medal, Military Division, for great bravery in saving the crew of a burning aeroplane.

The Staff Savings Group and Red Cross Penny-a-week Fund have been well supported.

I wish to thank you, Sir, Ladies and Gentlemen of the Committee for the great interest you have taken in the work of the Colony, and for the kindly consideration and assistance you have given me at all times.

I would also like to express my appreciation to all the members of the Staff for their efficient work and for the co-operation they have given me.

J. F. LYONS,
Medical Superintendent.

Hortham Colony,
Almondsbury,
Near Bristol.
May, 1944.

PART II.

REPORT OF THE MEDICAL OFFICER OF HEALTH.

To the Chairman and Members of the Mental Deficiency Acts Committee.

I have the honour to submit the following report on the domiciliary work of the Committee under the Mental Deficiency Acts, 1913-1938, for the year ended the 31st December, 1943.

Administrative Arrangements.

The administrative arrangements for the discharge of the Council's duties under the Mental Deficiency Acts, 1913-1938, apart from the control of Hortham Colony and the collection of contributions towards patients' maintenance, are, as hitherto, carried out by specially appointed officers under the supervision of the Medical Officer of Health.

Ascertainment.

The new cases which the Local Authority were called upon to deal with during 1943 under the Mental Deficiency Acts, were :—

<i>Number</i>	<i>Source of information</i>
46 ..	Local Education Authority
3 ..	Social Welfare Committee
9 ..	Police
28 ..	Miscellaneous
—	
86	

These cases were dealt with as follows :—

38 ..	Sent to Institutions
34 ..	Placed under supervision
— ..	Placed under guardianship
14 ..	No action taken
—	
86	

In addition, on the 31st December, 1943, there were 218 defectives in attendance at Special Schools under the control of the Local Education Authority, 180 at Barleyfields, and 38 at Eastcourt House.

The number of defectives on the 31st December, 1943, ascertained by the Council subject to be dealt with or who might become subject to be dealt with was 1394 exclusive of the number in special schools.

Supervision.

On the 31st December, 1943, the number of cases under supervision was 623, compared with 630 for the same period for 1942.

Guardianship.

On the 31st December, 1943, the number of cases under guardianship was 99, compared with 98 for 1942.

Licence.

At the beginning of the year there were 122 patients on licence and during the year 81 further licences were issued. 78 licences were withdrawn and the number of patients on licence on December 31st, 1943, was 125.

Discharges.

During the year 41 mental defectives were discharged from Order, and 30 discharged from supervision. The numbers for the previous year were 47 and 80 respectively.

Deaths.

There were 22 deaths among the institution, guardianship and supervision cases during the year, compared with 23 for 1942.

Occupation Centres.

The following classes were held:—

	<i>Sessions per week</i>	<i>Daily average attendance</i>
Adult Male .. ..	.. 5 days	19
Juvenile and Intermediate ..	.. 5 days	46
Adult Female .. ..	.. 5 half-days	6

A feature of the Occupation Centre of to-day is the change over in the classes of trainees. Previous to the war the adult population was in the majority by far, to-day the Juveniles form about two-thirds of the attendees. Places of employment have been found for the adults, only the most helpless remain, and in the case of the juveniles, the Centres make it possible for mothers to become employed. Though the Centre is very much handicapped in the prevailing conditions, it continues to carry out fully its assistance to the home life and occupation of the patient.

Medical Inspection.

The medical inspection and treatment of defectives attending the Occupation Centre is carried out through the clinics and hospitals attached to the health services of the City.

Institutional Care.

Six hundred and fifty-two patients are being maintained by the local authority in institutions, of which total 125 patients were absent from the institutions on licence.

R. H. PARRY, M.D.,
Medical Officer of Health.

Department of Public Health,
Bristol, 1.
May, 1944.

MENTAL DEFICIENCY ACTS COMMITTEE
Statement of Accounts for year ended 31st March, 1944

EXPENDITURE

Maintenance at Hortham Colony.

	£
Salaries, wages, etc.	21,019
Provisions	11,127
Clothing, Inmates and Staff Uniforms	3,098
Drugs, Medical and Surgical Appliances	647
Fuel, Light and Water	4,126
Cleaning materials and Laundry wages	1,425
Furniture, bedding, linen and hardware	1,736
Repairs to buildings	1,777
Transport and travelling	533
Printing, Stationery, Postage and Miscellaneous	1,418
Rents, Rates, Insurance and War Damage Conton.	2,689

49,595

Loan Charges	15,862
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£65,457

Maintenance at other Institutions.

	£
At Institutions under orders	14,652
By Guardianship under orders	4,396
Removal and other expnses	104

19,152

Occupation Centres	3,204
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Supervision and General Expenditure	2,783
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TOTAL EXPENDITURE £90,596

INCOME

Hortham Colony.

Occupational training—surplus	366
Superannuation Deductions	551
Rents	161
Miscellaneous	1,292
Emergency Hospital—Grant on account of maintenance	2,450

4,820

Occupation Centre	182
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Maintenance of Cases.

Other Local Authorities	32,887
Contributions under Voluntary Agreements	1,464

TOTAL INCOME £39,353

NET EXPENDITURE £51,243

Special Loan Repayment £6,104